Vol. XIV. AUGUST, 1876. No. 80.

THE

AMERICAN PRACTITIONER:

A MONTHLY JOURNAL OF

MEDICINE AND SURGERY.

EDITED BY

DAVID W. YANDELL, M. D.

Prof. of the Science and Art of Surgery and Clinical Surgery, University of Louisville,

AND

THEOPHILUS PARVIN, M. D., LL.D.

Professor of Obstetrics and the Medical and Surgical Diseases of Women, College of Physicians and Surgeons of Indiana.

PUBLISHERS:

JOHN P. MORTON & CO., LOUISVILLE.

YOHN & PORTER, INDIANAPOLIS.

THREE DOLLARS PER ANNUM.

CONTENTS.

Articles intended for the *Original Department* of this journal must be contributed to it exclusively.

The editors are not responsible for the views of Contributors.

THE AMERICAN PRACTITIONER.

AUGUST, 1876.

Certainly it is excellent discipline for an author to feel that he must say all that he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

Original Communications.

STRUMOUS OPHTHALMIA.

BY C. S. FENNER, M. D.

Strumous ophthalmia, called by McKenzie phlyctenular ophthalmia, and known in the modern text-books as herpes corneæ, herpes conjunctivæ, according as the eruption appears on the cornea or on the conjunctiva, is one of the most troublesome affections the physician is called upon to treat, and one in which both he and the patient, or the friends of the patient, often become heartily tired of each other.

I do not propose, in this paper, to write an exhaustive account of the symptoms and pathology of strumous ophthalmia, but rather to give to the general practitioner some points in regard to its causes and of the treatment which I have found to give the most satisfactory results.

On the first appearance of the affection, minute white elevations or eruptions are noticed on the cornea or conjunctiva, covered by epithelium. There may be but one or two of these phlyctenulæ, which may be either on the cornea or on the conjunctiva; or they may be more numerous and found

both on the cornea and conjunctiva, and also on the surrounding external skin. One or more is often seen at the sclero-corneal junction. The epithelial covering of the elevations is soon absorbed, allowing the contents of the vesicle to escape, leaving small superficial ulcers. On the cornea, however, the ulcers may extend more deeply and be covered with a yellowish opaque matter. The ulcerated surfaces soon heal, and are, when on the cornea—unless, indeed, the ulceration has penetrated to a considerable depth—again covered with transparent epithelium. Another crop of eruptions soon follows, and these are in turn succeeded by others.

The appearance of the pustules is accompanied by great irritability of the eyes, slight conjunctival redness, and by a most painful sensitiveness on exposure to light (*photophobia*). There is a sensation of smarting beneath the lids, with a copious flow of scalding tears, that excoriate the skin of the face over which they pass. These tears, entering the nose through the nasal duct, irritate the schneiderian membrane, causing an acrid discharge, which often excoriates the alæ nasi and skin of the upper lip. The extreme pain and irritation induced by light, cause, through reflex action, a spasmodic contraction of the orbicularis, which presses strongly on the eye; but when the light is excluded the spasm ceases, and the lids can be freely opened. The child will for hours bury its face in its mother's lap, or seek some dark place, as behind the bed or a darkened corner of the room, instinctively avoiding the light; but as soon as the sun goes down, opens the eyes, runs about, and becomes lively and cheerful.

The above mentioned local symptoms are the most prominent ones of this troublesome affection, which is rarely seen except in children and young persons having a decidedly marked strumous constitution; hence, the very expressive name of scrofulous or strumous ophthalmia, which of itself indicates the underlying cause of the disease, and plainly points out the course of treatment which should be pursued. The tongue is furred, the breath fetid, the upper lip and alæ nasi swollen, the abdomen tumid, the bowels torpid, appetite

morbid, and often redness and excoriation of the external ear. Usually both eyes are affected, but one is much worse, and they alternate in this respect. As stated by Mr. Lawrence, "The inflammation may suddenly get better, and will return as suddenly. There are often repeated attacks at longer or shorter intervals, and slight exciting causes will renew the disorder when the disposition is strong. In this way the affection lasts for many months or years, and it is difficult to say when the patient is permanently recovered. The affection of the eye often alternates with other symptoms; the ears get worse, and the eyes get better, or *vice versa*."

The strumous constitution is so graphically described by Mr. Lawrence, in his able treatise on the diseases of the eye, that I give it place here, believing that it will be appreciated by the readers of the Practitioner as highly as it has been by the writer of this article:

"*Scrofulous Constitution.*—All mankind are not formed after one pattern; if it had been so, the business of the physician and surgeon would have been much more simple than it is. There are diversities of natural organization, and analogous varieties in the forms of disease. Each individual has something peculiar in constitution, as well as in form and features. But the peculiarities with which it is more important that we should become acquainted, medically, are those which distinguish classes more or less numerous; and of these none is more common than the scrofulous. The word *scrofula* is used in two senses; either to designate that assemblage of characters which marks a particular disease, or to denote the peculiarity of constitution, generally original or connate, from which such distinctive characters are derived. In the former sense, *scrofula* is equivalent to *scrofulous disease;* in the latter, to *scrofulous constitution.* We can point out certain external marks of scrofula; but we have not yet discovered the differences in the elementary composition of the frame on which the characteristic of scrofulous disease depend. The morbid disposition, however, is strongly marked; certain forms of disease are so easily excited, and return so readily, that it is

almost impossible to keep them off. The absorbent glands, and some other organs of glandular structure, the mucous membranes and skin, the lungs, bones, and joints, are the parts most liable to scrofula. Of the membranes, such as are exposed to the external air suffer most; for instance, those of the eyes, nose, and lungs. Two kinds of constitution, differing considerably in some respects, are observed in persons called scrofulous. In one there is a pale and bloated countenance, a swelling of the upper lip and septum of the nose, and tumid abdomen. The mucous membrane of the stomach and bowels is easily disordered by errors of diet, or by trifling causes, which have but little or no effect on other persons. When these important organs are disturbed, the nutrition of the entire body is more or less impaired. There is a languid state of the circulation, so that the skin is pale and rough, and the extremities are cold; the muscular flesh is loose and flabby; and there is a kind of torpor in all the functions, bodily and mental. In the other set of subjects the integuments are thin, and the ramifications of the cutaneous veins are distinctly seen; there is an almost unnatural color in the cheeks. The circulation is rapid, the nervous system irritable, and both are easily excited. The various functions of the body and mind are performed quickly. A premature development of intellect is often observed in such children, and they are affected powerfully by all external influences."

Mr. Lawrence adds: "The liability to scrofula does not extend equally through the whole of life. Disease of this character generally, and strumous ophthalmia in particular, are not seen in infants at the breast, which, being kept warm, and having a supply of wholesome food prepared by nature, escape the two great exciting causes. They prevail, however, extensively from the end of suckling to the age of puberty, in which period the processes of nutrition and growth are going on actively, and easily disturbed by the circumstances already alluded to. Strumous ophthalmia is seldom seen after puberty; but other forms of ophthalmic inflammation are often found more obstinate in persons of scrofulous constitution."

The phlyctenulæ or pustules may occur in children free from struma, and strumous ophthalmia may exist without the eruptions; but these exceptions are rarely met with.

In this, as in other affections, the symptoms often vary in different cases; and, in reference to this subject, I must again quote from Mr. Lawrence, who says: "In describing diseases, we find it necessary to select the instances in which the characters are best marked. We do not find them exactly as they are described in books and lectures; and they, who are only acquainted with them from such sources, discover, when they have to examine the sick, that several morbid affections are not so clearly characterized as they expected. We give names to such forms of disease as are clearly marked, but we see many cases which do not come under our descriptions. There is an insensible gradation from one form to another, so that we can not draw an accurate boundary between them. This is the case with strumous and common ophthalmia. If we find the nosologies imperfect, we must recollect that they are not the productions of nature, but the work of man."

Treatment.—Since the treatment of eye diseases has largely fallen into the hands of specialists, I am satisfied from extensive observation that those ocular inflammations having their origin in constitutional causes, are not now so successfully treated as in former times, when this branch of medicine fell chiefly in the practice of the general surgeon, who habitually takes a broader and more comprehensive view of the causes of disease than do those whose minds are constantly directed in a single channel and to a single organ. Hence, the tendency of the specialist is to regard the diseases which he treats as of local origin, to be relieved chiefly by local treatment. This is exemplified in the modern text-books on the diseases of the eye, where take, for example, the chapters on phlyctenular ophthalmia, several pages are devoted to local treatment, while the constitutional treatment is disposed of in a very few lines.

Constitutional Treatment.—As strumous ophthalmia is but the local development of a constitutional affection, it follows

that the chief object of treatment should be to overcome that defective organization, and the various morbid conditions to which it gives rise, and which are always found accompanying this affection. As the bowels are torpid, and the stomach distended often with indigestible food, the use of purgatives is strongly indicated, and calomel or blue mass, combined with rhubarb or jalap, given so as to produce a free action of the bowels, will give much relief; frequently several doses are necessary before the tongue becomes clean and the tumidity of the stomach disappears. As soon as the latter results take place, there is almost invariably a marked improvement of the inflammatory symptoms of the eye; the sensitiveness to light is less or disappears, the redness decreases, and the ulcerations rapidly take on the healing process. I know of no remedy which has so powerful an influence over the morbid conditions accompanying strumous ophthalmia as mercury, given in minute alterative doses; and when the symptoms are very urgent, calomel or blue mass, with a view to its purgative effect. The distended stomach, furred tongue, and fetid breath, rapidly disappear under this treatment.

Sir William Wilde says: "There is a peculiar heavy breath belonging to strumous patients, which it is difficult to describe, but which, once perceived, is easily recognized ever after. I may here mention that I do not remember a single instance in which, for any cause, mercurial action was fully produced in a person possessing naturally what is termed 'bad breath,' that that most unpleasant affection was not removed by it."

I usually prescribe one or two grains of hydrarg. cum creta, with two or three grains of pulverized rhubarb, to be taken every second or third night, or sufficiently often to keep the bowels freely open. By far the most efficacious form in which mercury can be administered as an alterative to produce permanent effects, is the bichloride or corrosive sublimate. This medicine exercises a powerfully controlling influence over that defective organization which underlies or gives rise to these morbid conditions usually found in persons having the well marked strumous diathesis.

I again quote from Wilde, who says: "The third and perhaps the most efficacious form in which mercury may be used, is that of the bichloride, still commonly known in this country as the oxymuriate, one of the most valuable medicines in the entire pharmacopœia. A treatise might be written on the virtues of this remedy, and the vast field of disease over which it exercises a sanative influence, combined with Peruvian bark, which the chemists say is incompatible, but the product of the decomposition said to be produced by which may be the very substance which acts more beneficially; it is almost a panacea for most of the strumous inflammations in children and young people, and its power in controlling scrofulous ophthalmia, corneitis, iritis, etc., extends equally to the cure of kindred affections in the ear. . . . It is, moreover, when properly administered, one of the safest as well as the surest preparations of mercury; it leaves no ill effects, it rarely induces ptyalism, and patients improve in health, and absolutely grow fat, while using it."

I am able to confirm all that Mr. Wilde has said in regard to the efficacy of this most potent remedy. I have given it continuously, in hundreds of cases for many months, without producing any unpleasant results, and rarely without either entirely relieving or greatly ameliorating the ophthalmic symptoms, and at the same time improving the general condition of the patient. The following formula I have used for many years: Hydrarg. bichlor., two grains; aquæ dist., half an ounce; ammon. chlor., q. s. Dissolve and add tinc. cincho. comp., four ounces; syrup sarsapar., three ounces and a half. Dose, from one to two teaspoonfuls three times a day, just before eating.

Tonics are always indicated in strumous ophthalmia, and the most efficacious I have found to be quinia and iron. Dr. Isaac Hays has strongly recommended the syrup of the ioduret of iron. I have derived more benefit from the phosphate of iron, given in from five to ten grain doses three times a day. This may be combined with quinia given in grain doses, or the iron may be administered during the day and the quinia

taken at bedtime. Cod liver oil, where it does not disagree with the stomach, may be of benefit; indeed, all remedies which give tone to the system are admissible.

The diet should be carefully attended to, both with regard to quality and quantity of food, the meals regular; and indigestible food, such as cakes and candies, avoided. Meat may be allowed at breakfast and dinner, but not for supper. The diet should chiefly consist of meat, milk, vegetables, bread, and other farinaceous articles; ripe fruit is admissible, taken in moderate quantities. Exercise in the open air is desirable, whenever the photophobia will admit of it.

Local Treatment.—When the orbicularis muscle, from excessive use, has attained abnormal strength and development, canthoplasty is advisable in order to weaken the action of the muscle and diminish the pressure on the eye. One great objection to the use of local applications arises from the fact that, owing to great pain and irritation induced by light and the irritability of the child, the effort to open the lids is powerfully resisted, and force must necessarily be applied sufficient to overcome the utmost tension of the muscle. This effort often produces so much pressure on the eye and is attended by such an amount of irritation, as to more than counterbalance any benefit that might otherwise result from local applications. A solution of the sulphate of atropia, of the strength of two or three grains to the ounce of distilled water, dropped in the eye once a day, is a most effectual remedy in relieving the intolerance of light and in allaying the irritability of the eye.

After the inflammatory symptoms have partially subsided, it is a general practice now to dust a small quantity of calomel beneath the lids. This substance is supposed to exercise a chemical effect, so as in some unexplained manner to produce contraction or obliteration of the terminal branches of the blood vessels. If the margin of the lids be inflamed, or the external skin excoriated, an application of the amorphous yellow oxide of mercury in the proportion of ten to fifteen grains to the ounce of simple cerate, or the glycerole of

starch, will be found of benefit. An alum curd in such cases, placed over the eyes and retained by a bandage, is useful and often grateful to the patient. Pledgets of lint soaked in a weak solution of alum, placed over the eyes and confined by a compress bandage, will be of service, not only by the astringency of the alum relieving the excoriation, but by restraining the motion of the eyes, portions of whose surfaces have lost their epithelial covering, leaving the terminal nerves exposed to the friction of the lining membrane of the lids. For the excoriations of the alæ nasi, septum nasi, and schneiderian membrane, I have derived much benefit from the use of resin (basilicon) ointment.

LOUISVILLE.

A CASE OF CUT-THROAT—MARKED EFFECT OF OPIUM ON THE RESPIRATORY MUCOUS MEMBRANE.

BY E. P. EASLEY, M. D.

Jacob R——, a large, vigorous German, aged fifty-five years, after murdering his wife, set the house on fire, and attempted suicide by cutting his throat with a dull Barlow knife on September 25th, 1875. He severed the anterior jugular veins, superior thyroid artery, sterno-hyoid and sterno-thyroid muscles and trachea. When seen a few hours afterward there had evidently been profuse hemorrhage and great shock. The second ring of the trachea was removed and a part of the first, which was partially detached from the cricoid cartilage, and the ends of the trachea were united with wire sutures, and the external wound brought together with silk. Reaction came on during the evening through the use of stimulants. The parts became greatly swollen, suppurated, and on the fifth day the sutures cutting out the wound reopened, present-

ing a cavity filled with offensive pus, which running into the windpipe produced intense dyspnœa, which was relieved by placing the patient in the "all fours" position, thus allowing the pus to escape from the trachea.

The curved end of a gum catheter was now introduced through the wound into the trachea. This prevented dyspnœa, but had to be removed occasionally and cleared of the tenacious mucus; so I had constructed a silver tube, four inches long, with a caliber of three-eighths of an inch. He wore this six weeks, and while it remained *in situ*, respiration was carried on solely through it. This larger tube would also become occluded and cause violent dyspnœa, and would have to be removed instantly, cleaned and replaced.

The depressors of the larynx being severed, the elevators drew the larynx close up to the base of the tongue. A mirror introduced into the wound, with its reflecting surface looking upward, reflected a perfect view of the larynx, showing the relation of all the parts to one another. During inspiration and deglutition the vocal chords approached each other, and lay side by side, and in expiration separated. Aphonia was complete, but attempts to articulate contracted, separated, and rendered the chords pale. These movements were abnormal, for laryngoscopical examinations show that the action of these parts in the normal condition is the reverse of what I have described, except during deglutition. Aphonia, it appears, is due to a non-approximation of the vocal chords, let the pathological condition be what it may. Respiration was comparatively easy through the larger tube. The rings of the trachea were reproduced, and the trachea united, with the exception of a small opening in front. The external wound cicatrized, and the patient's general condition improved so that he was soon able to walk around; but in a few days œdema of the feet and ankles appeared, with paroxysms of dyspnœa; his pulse became very weak, and on the 25th of November he fell from his chair and instantly expired.

I made an autopsy, and found the lungs normal. The pericardium contained from five to six ounces of serum. The

walls of the right heart were in an advanced state of fatty degeneration, the finger being thrust through with ease. The columnæ carneæ and musculi pectinati were so soft as to be rubbed off with the thumb. The right ventricle was dilated with coagulated blood, and a coagulum composed of several layers extended three inches into the pulmonary artery, from the end of which a piece had been detached and carried into the lungs, thus producing the dyspnœa and instant collapse. All the essential factors for the production of a thrombus in the pulmonary artery were present, viz., a dilated and fatty heart, and an obstructed circulation in the lungs consequent upon violent and prolonged fits of coughing.

The remedies employed externally were water dressing, carbolic and salicylic acid; internally, opium, bromide of potash, muriate of ammonia and tonics. The bromide was given to obtund the sensibility of the mucous membranes of the larynx and trachea, and the ammonia for the bronchitis; but neither had the slightest effect. The opium given had a marked effect in allaying the cough and checking the enormous pulmonary and tracheal secretions. The mucus, which had been thick, tenacious and ropy, and had to be detached from the tube by a pair of forceps, became diminished in quantity and changed in character, so it could be expectorated with ease. If the opium was discontinued the cough returned and the expectoration assumed its original character. After this experience with opium, I would not hesitate to employ it in croupous or catarrhal inflammation of the lungs, and in bronchitis.

It is quite evident that this patient died of pulmonary embolism, and the remarkable effort of the trachea to repair the injury under such unfavorable circumstances proves that tracheotomy is not a very grave operation *per se*, and should be resorted to in the majority of cases where life is in danger from laryngeal stenosis.

NEW ALBANY, IND.

CHOLERA INFANTUM.

BY A. G. CRAIG, M. D.

Formerly Resident Physician of Cincinnati Hospital.

Cholera infantum, or, as it is generally called, summer complaint, is not as supposed by some a disease peculiar to this country. English writers describe the morbid phenomena of this affection under the head of infantile diarrhœa. Trousseau adopts the term infantile cholera. By other French writers it is usually called choleriform diarrhœa. It is an affection that occurs in this country from the month of May to October, its maximum frequency and severity correspond with the degree of heat, the disease increasing or decreasing as the mercury rises or falls in the thermometer. The disease is most prevalent in the months of July and August. It is not a disease confined almost exclusively to large cities, as is generally taught in our text-books. It is frequently met with in the rural districts, under the most favorable hygienic conditions. By some writers the term cholera infantum has been extended so as to include all the diarrhœal maladies of infancy, during the hot season. I shall restrict it to that form of infantile diarrhœa in which the stools are frequent and watery, accompanied by vomiting, great thirst, high temperature, and rapid emaciation.

Cholera infantum occurs commonly under the age of two years, and generally during the period of early dentition. For this reason the malady is associated with teething in the popular mind, and even some practitioners consider dentition a cause. The eruption of the teeth is doubtless often retarded by this affection, and the disease frequently aggravated by irritation of the gums, but dentition will not of itself produce it. During infancy, which extends from birth to the age of two and a half years, there is great functional activity and rapid development of the intestinal follicles, and the disease should be attributed to this cause, rather than to dentition.

But the most obvious cause of this malady is the intense heat of summer, and the anti-hygienic conditions to which it gives rise. In the large cities the heat is greater than in the country, the atmosphere is loaded with noxious vapors, especially gases arising from animal and vegetable decomposition. Children of the poorer classes, in insalubrious locations, living in crowded tenement houses, and in an atmosphere rendered impure by personal and domiciliary uncleanliness, are peculiarly liable to be affected, but the children of those surrounded by the most favorable hygienic circumstances, by no means escape. In many cases another cause coöperates, namely, indigestion induced by the use of improper food, which tends to impair the whole alimentary tract. Bottle-fed infants are especially subject to this affection. In some cases malaria contributes to the intensity of the disease.

Cholera infantum in the great majority of cases is preceded by simple diarrhœa, the dejections being more or less numerous and copious, but not such as to excite much alarm. In other cases the attack commences abruptly. The diarrhœa is profuse, the stools often of a green or yellow color, but more commonly light-colored and watery, and almost always contain particles of food, especially undigested milk. The discharges are generally offensive from the onset, and when the disease is protracted, they are frequently streaked with blood. The diarrhœa rarely continues for any length of time before an extreme irritability of the stomach manifests itself. Vomiting is a prominent and persistent symptom, everything taken into the stomach being immediately rejected, sometimes with great violence. In other cases there is constant retching without vomiting. In many cases the irritability of the stomach continues throughout the attack; in others the vomiting ceases while the purging continues unabated, or even increases in violence, and whatever food or drink is taken passes off rapidly without undergoing much change. In some cases the dejections are so thin and watery, as to soak into the diaper, and scarcely produce more of a stain than does the urine, and occasionally are almost odorless.

Thirst is a prominent and persistent symptom, the little patient craves constantly cold drinks, and ice is taken with great avidity. The appetite is gone, yet the infant seizes the breast eagerly in order to relieve the great thirst. The tongue in the commencement of the attack is covered with a white, slimy mucus; in protracted cases it becomes red and dry. The pulse is usually quick, frequent, small and tense, and the respiration somewhat increased in frequency. The skin is dry and harsh, the head and abdomen are hot. The thermometer indicates a temperature of 103° to 107°, and in one case under my care, which proved fatal, 110¼°. The infant is restless, and fretful, and generally sleeps with its eyelids partially open. The emaciation is more rapid than in any disease, except Asiatic cholera. The eyes are sunken, languid and glassy; the countenance pale and shrunken; the lips thin, dry and shriveled. As death approaches, the infant rolls its head about; utters plaintive, scarcely audible cries; the abdomen becomes tympanitic; the hands and feet of leaden hue, and sometimes œdematous; the skin has a clammy coldness; the discharges from the bowels frequent and very offensive; urine scanty or suppressed; complete coma results, death being in many cases preceded by convulsions. In some cases effusion takes place in the brain, and the patient has all the symptoms of acute hydrocephalus.

Cholera infantum is essentially an inflammatory malady. In inflammation of mucous surfaces the redness is apt to partially disappear in the cadaver. After death an examination reveals turgescence of the intestinal follicles. The mucous membrane is vascular and softened, and the solitary glands, and the patches of Peyer, present an inflammatory hyperæmia; and sometimes ulcerated patches are found throughout the intestinal canal. When the brain is involved there are found softening and injection of the cerebral tissue, and congestion of the cranial sinuses, veins, and capillaries.

Treatment.—This remains a *quæstio vexata.* The great variety of treatment instituted for the relief and cure of this affection, is evidence of the difficulty experienced in the man-

agement of it. I am, from no limited experience, a believer in calomel in the early stages of this disease. Given at once, so soon as the disease manifests itself, nothing else will so promptly restore the healthy action of the stomach and bowels. The medicine is best administered dry on the tongue, for being tasteless it is swallowed without repugnance. It is one of our best remedies for the relief of sick stomach in this affection. I have known it to succeed after all other means had failed. I administer from one-fourth to two grains, two or three times daily, or every two or three hours in urgent cases, when the discharges are frequent and exhausting. A spice poultice, wet with brandy, should be kept over the abdomen so long as the vomiting continues, and should be renewed frequently, so as to maintain its strength. A sinapism to the epigastrium is often necessary. Pounded ice may be given to quench the thirst. When the stomach is very irritable, water should be given sparingly or withheld altogether. In a majority of cases opiates are indispensable. The paramount object is the arrest of the exhausting discharges, and to relieve the griping, until the calomel has had time to effect a change in the secretions. The remedy on which most dependence is to be placed in effecting this object is opium. Laudanum is a most eligible preparation. When the stomach is very irritable, and the discharges frequent and exhausting, and attended with griping, it should be given by the rectum in starch-water. Sometimes acetate of lead injections—from two to four grains, in starch-water—may be farther needed, for the same intent. So soon as the irritability of the stomach is sufficiently quieted as to allow of its administration, the remedy which I have found generally to promptly restrain the disordered action of the bowels, is a combination of calomel, prepared chalk, acetate of lead and opium.

℞. Hydrarg. chlor. mit., . . . gr. iv.
Cretæ præp., ... gr. xxxvj.
Plumbi acetat., ... gr. xij.
Opii pulv., ... gr. j.

M. ft. ch. No. xii. One powder every two to four hours to an infant one year old.

I have also used the following formula with the best results in this affection. The dose is for an infant of one year:

℞. Tinct. opii, ... gtt. xxiv.
Bismuth subnitrat., ... ʒij.
Mistur. cretæ, ... ℥ij. Misce.

Shake bottle thoroughly, and give one teaspoonful every three or four hours.

In some cases I have used with gratifying results the subnitrate of bismuth and the compound powder of chalk with opium, combining as it does an astringent, alkali, and opiate. The bismuth is an efficient anti-emetic, and is a valuable remedy, not only in this disease, but in all of the diarrhœal maladies of infancy. Its effects are entirely local, namely, upon the gastro-intestinal surface. It undergoes some chemical change with the secretions, which turns it black, and gives more consistence to the discharges. There is no positive evidence of its absorption.

Creasote is a valuable anti-emetic in this affection, counteracting as it does fermentation in the alimentary mass. It is best given in mucilage. Lime-water and milk, besides being nutritious, are efficient in relieving the irritability of the stomach. There are exceptional cases of cholera infantum in which we are left in no doubt as to their malarious nature. Such cases will require quinia or cinchonidia in conjunction with other remedies.

In protracted cases the vegetable astringents are of service. A decoction of the root of geranium maculatum, sweetened to the taste, is the best; it checks the discharges, and promotes digestion.

If the head be hot, and stupor or coma be threatened, with other marked cerebral symptoms, the opiate should be omitted. In these cases a few leeches behind the ears, and the application of cold water to the head, may be proper.

In every case the gums should be carefully examined, and if found to be swollen and inflamed, they should be freely lanced.

Attention to diet and regimen is of the greatest importance.

If the milk of the mother, from pregnancy or other causes, is found to disagree with the infant, it must be weaned, and fed upon rich cow's milk, sweetened but not diluted. Pure milk is generally considered by physicians as the most appropriate article of food in this affection; but I have frequently met with cases in which the vomiting and purging were increased by confining the little patient to a milk diet, large masses of caseum being ejected from the stomach, and passed from the bowels. Egg-water, made by dissolving the whites of four eggs in a pint of iced water, to which a teaspoonful of bicarbonate of soda has been added, is, in my opinion, one of the very best articles of diet in cholera infantum. By the use of this drink I have seen patients rescued from imminent danger of collapse. It is taken with avidity by very young children, and is very seldom ejected, is readily digested, the albumen passing into the circulation and replacing that element of the blood exuded in the watery evacuations. In some cases I have administered, with the best results, the white of an egg beaten well with a spoon, to which a lump of ice had been added. Arrow-root, farina, chicken-water, essence of beef, strong broths, and broiled tender beef, have been found to answer best with some. Trousseau and others recommend raw meat made into a kind of *purée* by being reduced to a pulp in a mortar and pressed through a fine sieve, so as to separate the vessels and areolar tissue. I have had no experience in the use of raw meat, but the liability to tænia and trichina, as a result of eating uncooked meat, is not to be overlooked. Vegetables and fruits, and every kind of food which is not readily digested, should be prohibited. Many children will require alcoholic stimulants, preferably with their food, for support. Pure brandy, if it can be obtained, is the best stimulant. Elixir of calisaya bark is an eligible preparation, combining as it does a tonic and stimulant, agreeable to the taste. Pepsin is often beneficial.

The child should be bathed daily. Its apartments should be clean, dry, and freely ventilated, and so arranged as to be darkened during the day. The clothing should be sufficient

to protect the child against the sudden changes of the weather, but not so warm as to overheat the body. The custom of dressing the child in flannel and other warm clothing, can not be too much reprehended. During the extreme heat of the day, a thin cotton dress is all that is required. The babe should be carried into the open air in the shade of trees, but should not be exposed to the warm rays of the sun.

In the close built parts of a large city, all treatment may fail in some cases of cholera infantum, but the patients will speedily recover on being carried into the salubrious air of the country. The details of the treatment above indicated, must, of course, be left to the judgment of the medical attendant. Protracted summer complaint affords scope for perseverance and contrivance in finding remedies to control the vomiting, to restrain the exhausting discharges, and to improve the digestive powers of the little sufferer.

GHENT, KY.

CAPILLARY BRONCHITIS.

SYNONYMS—CATARRHAL PNEUMONIA, BRONCHO-PNEUMONIA.

BY JOHN L. COOK, M. D.*

After reading Juergensen's article on catarrhal pneumonia, in Ziemssen's Cyclopædia of the Practice of Medicine, Vol. V, I announced before the Henderson Medical Club that the disease described was really capillary bronchitis.

Catarrhal pneumonia, so called, is a secondary affection, generally commences in the external air passages, and travels inwards towards the lungs. It is preceded by a common cold, which passes downwards into the large bronchial tubes, where it is known as ordinary bronchitis. Finally, when the inflam-

* Remarks made before the Kentucky State Medical Society at Hopkinsville.

mation extends to the minute bronchial tubes, we have capillary bronchitis, the disease under present consideration. This is the complication which destroys so many children with hooping-cough, and so many patients with measles. Indeed, it is claimed by high authority that lobular pneumonia in children under five years of age is not inflammation of the lung substance at all, but a form of bronchitis.

Capillary bronchitis is a very grave, and frequently a very rapid disease, death ensuing in from three to five days. The patient may have an ordinary bronchitis, in which he is doing very well; but when the minute tubes are invaded, alarming symptoms at once show themselves. While in this, as in all acute inflammations, fever is usually present, the danger of death is not from excessive temperature, but from asphyxia. The respirations often reach fifty per minute; the pulse beats one hundred and fifty in the same time. The surface of the body is blue, from the want of aeration of the blood. The absence of pain in the chest presents a striking contrast to acute lobar pneumonia. Furthermore, the malady is always bilateral. The product of the inflammation is serous in character, in which there is proliferation of epithelial cells.

But what does physical exploration of the chest reveal? It discloses the subcrepitant râle, as Juergensen says, but when it does so, it is pathognomonic of capillary bronchitis, of which it is the physical sign, when pulmonary tuberculosis, hemoptysis, œdema of the lungs, etc., are excluded; but then the history of the disease under which the patient is laboring should be taken into consideration. As ordinary bronchitis is associated with the malady, the sibilant, sonorous and mucous râles will be observed. There may be no change in the percussion note, but should collapse of the lobules of the lungs occur, as is often the case, there will be dullness on percussion.

In order to make the subject clear and satisfactory, it will be proper to refer briefly to acute lobar pneumonia, its history, and its physical signs. Croupous pneumonia, as it is termed, seizes the lung suddenly and directly, and is generally

unilateral. In the midst of the night, perhaps, the patient is attacked with a chill, pain in the side, and difficulty of breathing. Fever soon follows. The pulse is from one hundred to one hundred and twenty per minute; the respiration from twenty-five to forty; the mouth is dry, and the secretions in general scant. A distressing cough, at first dry, annoys the patient, but the characteristic rusty-colored expectoration soon makes its appearance. This is the first stage, or that of congestion. Physical examination discovers the crepitant râle, which is due to a slight exudation of plastic lymph into the air cells, and a closure and separation of their walls during inspiration and expiration. In addition, there will be broncho-vesicular respiration and exaggerated vocal resonance. Distinct dullness on percussion will be readily detected.

Here is presented an opportunity for the physician to accomplish much good. Heroic measures, properly directed, may abort the disease. But if we stand by, with our hands folded, or rely upon expectant treatment, we may have the proud consolation of knowing the patient has "typhoid pneumonia," or the second stage, that of consolidation, has been reached. In that event, the air cells are completely blocked up with the exudation of lymph. The vesicular murmur is entirely suppressed. The broncho-vesicular respiration is supplanted by the bronchial respiration, and the exaggerated vocal resonance gives way to bronchophony and whispering bronchophony, which are the correlative signs.

The physical signs which obtain in the solidification of croupous pneumonia are present also in the solidification of catarrhal pneumonia, when there is dullness from the collapse of the lobules of the lungs. In other words, the pitch, quality and intensity of the broncho-vesicular respiration, bronchial respiration and bronchophony, do not depend on the character of inflammation, whether croupous or catarrhal, but on the degree of consolidation.

One strong point which I wish to urge here, is that in the inflammatory product of catarrhal pneumonia there is no lymph. This being true, there can be no crepitant râle in

the disease, for this sign depends upon this glutinous deposit. Juergensen states that his ear is unable to distinguish the crepitant from the subcrepitant râle. Practically the crepitant râle is a dry sound, heard in inspiration only; whereas the subcrepitant râle is a moist, bubbling sound, usually heard both in inspiration and expiration.

It is not my design to say that catarrhal inflammation may not dip down into the air cells; but should it do so, we possess no means which would enable us to make a correct diagnosis.

CARDINAL DIFFERENCES TABULATED.

Croupous Pneumonia.	*Catarrhal Pneumonia.*
1. Seizes the lung directly and suddenly.	1. Commences in the external air passages and travels inward.
2. Generally unilateral.	2. Always bilateral.
3. Crepitant râle.	3. Subcrepitant râle.
4. Plastic lymph.	4. No plastic lymph.
5. Dullness from exudation.	5. Dullness from collapse of lobules.
6. Fever high.	6. Fever not marked.
7. Pain in the side.	7. No pain in the side, or but little.
8. Death from asthenia.	8. Death from asphyxia.
9. Pulse 100 to 120.	9. Pulse 150 or more.
10. Respirations from 25 to 40.	10. Respirations, 50 or more.
11. Cyanosis late, if at all.	11. Cyanosis early.
12. Rusty-colored expectoration.	12. Muco-purulent expectoration.
13. Death rate not more than ten per cent.	13. Death rate two-thirds or more.

In my opinion all diseases in which there is generally a rapid and fatal course, should be met with heroic treatment. The attempt should be made to arrest the onward march of the disease, subdue its active forces, and relieve its pathological changes. Nature does her part nobly, but because she is faithful that does not prove that she does not need aid. In most cases she is victorious, but in many instances she is pushed to the wall. In the first stage of capillary bronchitis, I should administer such sedatives as veratrum, ipecac, ergot and quinia, to which ammonia might be added. Thus:

℞. Syr. ipecac., ... ʒvj.
Verat. tinct., ... gtt. xxiv.
Quiniæ sulphat, ... gr. xxx. Misce.

Dose, a teaspoonful every two hours if necessary. If the pulse become weak, five grains of carbonate of ammonia should be added to each dose.

The danger in this disease is not from exhaustion, but from asphyxia; therefore, we should control the inflammation as much as possible, so that sufficient air can enter the lungs. Active remedies, when properly administered, control inflammation and the morbid processes to which it leads. It should be remembered that exhaustion by excessive action is very dangerous. Sedatives prevent such disturbances, and so restore the patient. Bring the pulse to the normal standard, and there hold it. Then use quinia, ergot, etc., to constringe the blood vessels in the engorged bronchial tubes.

Should exhaustion manifest itself, heroic measures must be suspended, and then rely on whisky, quinia and ammonia, in full and repeated doses. Opium, if used, should be given with great circumspection.

HENDERSON, KY.

AN ORIGINAL SUICIDE.

BY W. W. VINNEDGE, M. D.

On Saturday, the 10th day of June, 1876, James A. Moon, a farmer, thirty-seven years of age, residing on the Wea Plains, nine miles west of Lafayette, left home and came to this city, and made every preparation to make his name notorious. On his arrival in the morning he registered his name at the Lahr House, and told the proprietor "he would like to have a *good* room shown him, as he would probably occupy it three or four days." A number of rooms were then shown to him before one was found suitable, it being No. 41, on the upper floor, immediately over the market space, and not accessible to view from any direction. While selecting the room he remarked to the porter, "that he wanted a room as

far away from the noise as possible, as he slept but little except in a quiet room, and not at all if troubled by noise." After selecting his room, he remarked, "Room 41 suits me first-rate." He then locked the door, left the house, and was not seen again until late in the afternoon.

On his second visit he brought a heavy trunk, which he charged the porters to carry right side up and with great care, as its contents would not permit "jostling." To see this order properly executed, he followed the men to his room, showing just where and how to place the trunk. He then again went down on the street, was shaved, visited a short time with two or three old soldier friends, returned to his room between eight and nine in the evening, and was not seen again alive. During the entire time of these preparations he was cheerful, laughing and talking familiarly and freely with his acquaintances, giving especial attention to army reminiscences. When the boy at the foundry, who drilled the holes in the pole of the broad-ax used in his destruction, and through the iron upright bars to which the broad-ax was attached by bolts and screws, asked him what he intended to make, he replied, "An instrument for making fruit-baskets."

The room that he selected at the hotel is twelve by fourteen feet, having but one window which opens towards the west, and two doors, one in the south wall opening into an adjoining room, and one in the east wall opening into the hall. The furniture of the room consisted of a bed, wash-stand, table, and the trunk which contained the instrument of death, and which, on account of its construction and *modus operandi*, has been called "the Moon guillotine." The essential parts of the instrument are a broad-ax and lever screwed at one end to the floor. The ax was secured to this lever, seven feet in length, the lower two-thirds of which consisted of wood, by upright pieces of bar-iron fastened with bolts and screws. The lever was composed of three separate parts, for convenience in transportation, firmly bolted together, the widened end being attached to the floor by means of hinges to prevent any possible lateral motion. At the other end of the lever, the iron

bars to which the ax was attached were very heavy, in order to give the machine great effectiveness when put in motion. The ax being elevated, was sustained at the proper angle for falling the greatest distance possible by means of a double cord attached to the free end of the lever, and to a small hook in a bracket, which was securely fastened to the wood on the side of the window, about five feet from the floor. On this bracket was placed a lighted candle between the cords, which were consumed when the candle had burned sufficiently. The ax being then unsupported, fell to do its fearful execution.

I am indebted to Mr. Orth Stein, of this city, for the following illustration, as well as the others in this article. This one shows the suicide in position waiting for the ax to fall.

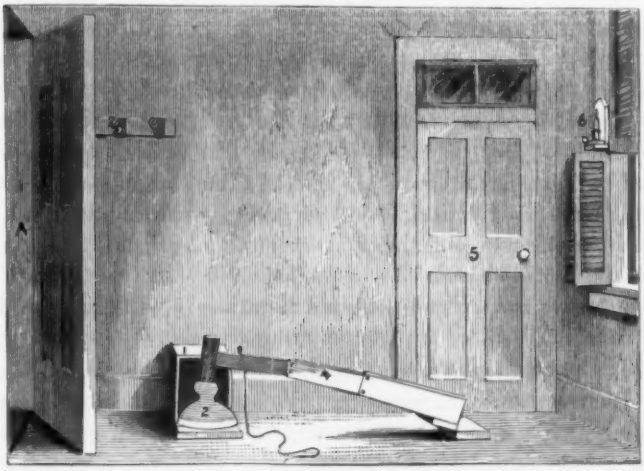
1. Ax on its shaft in elevation; bracket and candle in rear of ax. 2. Box with perforations, and stick holding back Moon's chin. 3. Moon in position to receive ax. 4. Bed partly covering his legs.

The suicide had placed an ordinary soap-box on its side, with its open end just even with the line marked where the ax would fall. The ax consequently, in falling, just grazed the open end of the box, and as the lever was secured at the fulcrum by hinges, it must fall "true." This box contained his head when he lay stretched out on the floor at right

angles to the direction of the falling ax. Three pieces of pine board sustained his neck; and to keep his chin out of the sweep of the falling ax, he had supported it by a little wooden rod, one-fourth of an inch in diameter, placed across the box. This rod assisted in preventing the head and upper part of the trunk from being displaced.

But Moon was not wholly indifferent to the fear of pain, and had obtained two ounces of chloroform, with which he saturated a quantity of cotton. The cotton was placed in the box, so that the chloroform could be inhaled after he had adjusted himself by stretching out on the floor at right angles to the path of the guillotine, his head in the box and feet under the bed; his body was firmly fastened to the floor by straps and buckles. While the candle was burning he occupied this position, inhaling the anæsthetic. The flame reaching the cord it was burned through, and the ax fell with fearful force, severing the head completely from the body.

The following illustration exhibits the machine after it had done its work and the corpse removed.



A—Door of room No. 41. 1. Box for Moon's head, with cross-stick to hold back his chin. 2. Ax. 3. Iron bars riveted to ax. 4. Shaft of ax hinged to board-piece screwed to floor. 5. Door to room No. 40. 6. Bracket and candle.

James A. Moon was a man of very fine figure, being six feet two inches in height, and weighing one hundred and ninety pounds. His hair and eyes were brown, and his face exhibited a great deal of character. The annexed illustration is one made by Mr. Stein, from a picture taken of him at the close of his service in the United States Army in 1865. And although it may seem like prophesying after an event, most persons who examine his counterfeit presentment, will see it presenting decided evidences of insanity; it is the face of a man of unsound mind. He always enjoyed talking about mechanics. It was a hobby with him. One of his neighbors states that he without assistance became an excellent blacksmith, learning the trade during the intervals between working hours on the farm. His mind had a tendency to "run" on methods of causing death. He had great admiration for men who have rendered their names famous as inventors of machines which would cause death suddenly and with dispatch. During a service of three years in the Sixteenth Indiana Battery, he would spend his leisure time in making out of wood, with a penknife only, various articles, exhibiting great ingenuity in design and skill in execution, and presented the products of his labors to his comrades as souvenirs. He had a good education, was temperate in his habits and kind to his family. His intimate friends state that he was thoroughly familiar with the Bible—with both the Old and New Testaments—though a skeptic as to the inspiration of each. All of his acquaintances testify to his habitual genial and pleasant disposition.

The question has frequently been asked, was Moon unconscious at the moment the ax fell? I have thought not. Any one familiar with the administration of chloroform by inhalation, will understand why I think two ounces of the drug poured on an ordinary roll of cotton batting, at a single time,

will not produce deep sleep—anæsthesia. As the bottle was found on the table, at least six feet from where Moon's body was found after death, I conclude that he, being uninstructed as to the use and effects of chloroform, saturated the cotton at the table, having perhaps previously lighted the candle, placed his body in position, buckled the straps over it, placed the rod under his chin, and then the cotton over his nostrils. This must have been his last act. From these circumstances, and the knowledge that chloroform usually causes struggles in vigorous men while passing through the stage of excitement, and the fact that Moon left no evidence of any struggle, I conclude that he was conscious—perhaps somewhat stupefied, but still conscious—while waiting for the candle to burn sufficiently low to divide the cord.

Some idea of the curious workings of this diseased mind, as he busied himself at his night work, may be obtained from the inscriptions placed at irregular intervals, in pencil marks, on the lever; "Kari kari," supposed to be the name he gave his machine; "Patent applied for;" "For sale or to let."

This remarkable suicide affords much food for reflection to all classes. To the physician, especially the psychologist, it is eminently instructive as illustrating the doings of disease in the mind of a man apparently in a good state of health and in the prime of life. Accident has placed me in possession of some general remarks on this case, which I venture to use without the knowledge of the author, Dr. Thomas W. Gordon, one of the Vice Presidents of the State Medical Society of Ohio:

"What curious freaks the creature man shows in this short mundane existence. Most people hold life the chief boon, and yet most of them sacrifice it for a whim, or allow it to be frittered away piecemeal for momentary enjoyments or excitement. Moon is not the only one who has exchanged life for notoriety. Some call it fame, and some pleasure; yet all alike, in a few decades, sink to the same plane. Yet 'his taking off' was startling to the crowd, because of the devilish ingenuity displayed; the steady hand with which he signed

the contract, giving his life as a fair exchange for the ephemeral notoriety he could thus obtain."

LAFAYETTE, IND.

TINCTURE OF CANTHARIDES AND CHLORAL IN ENURESIS.

BY GEORGE N. MONETTE, M. D.

Physician to St. Anna's Asylum, New Orleans.

I have observed with much interest the numerous remedies, and their vaunted therapeutical indications, in the treatment of enuresis in children. Each remedy I tried, but continually failed in benefiting my patients until I had almost despaired of ever curing this habit, so mortifying to girls and boys as they advanced in childhood. Believing the pathological condition an atonic condition of the sphincter vesicæ as well as the muscular structure of the bladder, I tried the tincture of cantharides combined with chloral. The combination fulfilled the indications in reëstablishing the tonicity of the vesical sphincter, as well as modifying the excessive irritability of the muscular coat of the bladder. The tincture of cantharides must not be used in maximum doses, or till strangury is produced, the age and strength of the child being taken into consideration. In enuresis I have used cantharides alone to verify its efficacy, and have also used it to palliate the strangury often present in cystitis, also in cases where enuresis complicated cystitis.

The chloral exerts a palliative or antidotal influence, preventing too violent specific action of the cantharides; hence I deem the combination expedient. I have treated a number of cases of cystitis, in both male and female, this summer, and all have complained of enuresis and strangury. I have used the above remedies with success in these cases, and trust the profession may find them equally efficacious.

NEW ORLEANS, LA.

Reviews.

Spiritualism, and Allied Causes and Conditions of Nervous Derangement. By WILLIAM A. HAMMOND, M. D., Professor of Diseases of the Mind and Nervous System in the Medical Department of the University of the City of New York, Etc. "Ratio quasi quædam lux lumenque vitæ."—CICERO. Illustrated. New York: G. P. Putnam's Sons, 182 Fifth Avenue, 1876.

It was said by the wise king of Israel that, "of making many books there is no end;" and it really seems that Dr. Hammond has set about proving the truth of the saying in good earnest. If ever any man was seized with an itch for scribbling it is he. He would appear from the products, one can scarcely say of his mind, but of his scissors and ink-horn, to be engaged in answering the question, not how many, and what books are necessary for the advancement of the cause of truth and the good of mankind, but what, and how many books, a real frenzy for literary notoriety, may enable a man—sleepless as the insane are sometimes known to be—to produce, without regard either to the promotion of truth or the well-being of men. Of course, his books throughout display this weakness and vanity in the writer. His facts, picked up everywhere, by running the indexes of books, or sweeping the field of his own memory or imagination for them, are not infrequently irrelevant to his subject, and to each other, and without any near relation to the conclusions into whose service he has drafted them, except such as his own will or the mere chances of his wayward wanderings, may establish between them. His inductions are seldom supported by sufficient instances, sufficiently apt and relevant, while his deductions are quite as unsupported by his premises, and evince an incapacity to reason worthy only of the merest

sciolist. Whatever may have been said to the contrary, no book which as yet he has given to the public, within the last ten or twelve years, is entitled to exemption from these observations. None of them contains any considerable indications of thoughtful labor. All of them clearly show that his mind either lacks scope and grasp to take in all the materials pertaining to a given treatise, and consider them at once together, or patience and industry to calmly survey, consider and arrange them, so as to bring each to its appropriate place and into its proper relation to each other and to all, and so to reduce all to scientific unity. Indeed, if it be conceded that all his materials in any case had been swept into his mind before his labor of reproducing them in book shape commenced, we learn from a glance at the product that they must have been and remained there, until he ejected them, like the contents of the gourmand's stomach, without digestion; for they have come forth, like Ovid's chaos, *rudis indigestaque moles.*

If Dr. Hammond would confine his abortive labors to his own profession, he might be spared the gravest censures to which he is justly entitled; for, in that case, his learned brethren would soon rid themselves of his trashy accumulations, and he would become powerless to harm them, either by getting their money or time, on the meanest of all possible false pretenses—a worthless book. But he has transcended his professional sphere, and become a biographer, journalist, and reformer. He assumes to be an instructor of the general public, the legislator, and the judge. In every relation thus sought to be established, the same restless activity, the same crude and trashy products, and the same arrogant pretension to superior science, have continually startled, astonished, and bewildered the public. "He speaks as one having authority," and yet upon examination he is found to be simply inflated. No bubble on the whole surface of literature so well deserves to be punctured. He is one of the shams that ought to go down; and yet to put him down thoroughly, as thoroughly might be done, would require a thorough review of his differ-

ent books. This would do it; for then it would appear that he has thus far been kept up only by great activity, pretension and audacity. Our space does not enable us to perform this necessary labor; but we indicate the field, and invoke its occupation by some larger journal and more competent hand. A few instances of some of the qualities of Dr. Hammond's books, to which we have called attention, must suffice for the present. In selecting these, we have limited our choice to two of his many books, namely: "Insanity in its relations to Crime," and "Spiritualism and Nervous Derangement"—the treatise more immediately under consideration.

"Insanity in its relations to Crime," is a brief commentary upon three cases derived from European reports. The space occupied by the reports is considerably more than half the book; and yet no logical relation exists between the cases and the commentary, which would be almost equally intelligible without as with them. But books can not be made, or pages filled without matter; and in this age and country some men make books without paying any very close attention to their contents. But waiving objection to this little book, on the ground of a want of relation between its parts, a few examples will show that in regard to that part of it which is the author's own, we do not do him injustice. He says:

"Clearly intention can not constitute the essential feature of crime, for the best men are liable to err, and *mistake* is frequently more productive of evil results than a *deliberate crime*. It is punished often too with far greater severity than a premeditated legal offense—both by law and society."

It is difficult for us, uninitiated into Dr. Hammond's views and principles as we are in spite of our best endeavors to understand him, to ascertain the sense in which he employs the terms "crime," "mistake," "deliberate crime," and "legal offense." To what civilized code does the author intend we shall go for definitions? In their ordinary sense, the whole passage is senseless jargon. It is founded on a quotation from Beccaria on Crimes, in which that author is endeavoring to show that intention ought not to be the sole criterion upon

which the legislator declares an act a crime, but that the consequences of the act to the public must constitute a basis of the recognition of crime in any given act. Upon this most reasonable and almost universally accepted doctrine, Dr. Hammond bases his doctrine that, intention is no criterion of the existence of crime at all—a conception no where sanctioned by Beccaria or any other respectable civilized author. Beccaria was arguing against the meddlesome spirit of the legislator, who, looking to the intention *alone*, would make every act done in pursuance of a wicked or evil disposition a crime, whether it tended to the injury of society or not, and insisting that only those acts which tend to public injury should be so treated. And from such an argument, Dr. Hammond deduces the conclusion that intention is no element of crime at all. He finds an argument against intention being an element of crime, in the fact that if it be so regarded, it will be impossible to avoid "error in regard to its existence or extent;" and adds, "if it is made to consist in intention, there can rarely be any certainty on these points, for a shrewd person may so cleverly conceal his real purpose as to make discovery out of the question." Now, it is notorious that in all great public trials the question of intention is far from being the most difficult; and that, indeed, it is in most instances not difficult at all. The difficulty usually lies in proof of the fact, and the prisoner's connection with it; and when these are established, all the rest is plain. The question of intention is involved in every moral act; and there is none so constantly and satisfactorily determined by men, in their daily intercourse with each other. All actions, from the most trivial to the most grave, that involve a moral element at all, are held to be right or wrong, good or bad, innocent or guilty, according to the intention with which they are done.

His discussion of the nature of law and the origin of crimes is ridiculous. In its course he says: "It is no valid argument against a law simply to demonstrate its injustice. It must be shown to be injurious to society in order to be successfully attacked." It is not then to be taken for granted that injus-

tice is injurious to society! Yet every society is forced to establish or accept the state for its protection against injustice. The state, in fact, is but organized to give expression to man's ideal of justice, which it represents. But the author gravely informs us that when the state contradicts this ideal and destroys it, in one of its laws, society is not injured. The truth is, the first of the two sentences just quoted is a contradiction in itself; for the very notion of "a law" carries with it that of justice, and to deny of it the quality of justice, much more to prove it to be unjust, is to utterly destroy the conception of it as law.

But a complete review of this little book would require that every paragraph should be made the subject of special discussion. The most remarkable portion of the volume is that which relates to the acts of the insane, and our dealings with them as criminal or the contrary. A single quotation on this subject must suffice. After having spoken of the restraints imposed upon the insane in hospitals as punishments, he proceeds:

"Now, the same is true of the insane outside of asylums—and there are many such who pass through life scarcely suspected of being the subjects of mental aberration, but who simply wait for the exciting cause which is to bring their latent susceptibilities into action. Let them understand that insanity does not necessarily license an individual to do what he pleases without punishment, and a power is brought in aid of their wavering intellects which may turn the scale definitely in their favor. It is not only for the safety of society, therefore, that insane criminals should be punished, but for the sake of other insane who are not yet entirely deprived of responsibility."

If anything can be worse in view of reason, or more apt to illustrate the manner of the author than this, it will be difficult to find it. "Insanity does not necessarily license an individual to do *what he pleases.*" Does the insane ever do *what he pleases?* It has been generally maintained, and by none more strongly than Dr. Hammond, that to be insane is to exclude

choice, or the notion of "what he pleases" from the movements of the insane. Then again, "it is not only for the safety of society . . that insane criminals should be punished, but for the sake of other insane who are not yet entirely deprived of responsibility." This is truly wonderful. The two classes of insane persons here mentioned embrace all. "Insane criminals" are to be punished, for the sake of society, and to deter other insane persons from becoming "insane criminals." In other words, when the threat of punishment fails to deter an insane man from doing an act that is a crime when done by a sane man, punish him. It will tend to deter other insane men from committing similar acts. It has not had that effect on the man to be punished, however; and if it fail to have the desired effect on him who witnesses or hears of the punishment, then again he shall be *punished* for the good of society, and to deter others from doing similar acts. And so the law, like the logic of the author, is to go round like the wheel of Ixion in one eternal circle. But, as applied to "the insane criminal," punishment has no meaning, and might be just as properly prescribed for a horse or an ox.

There is scarcely a page in the book where such notions of law and logic do not meet and astonish the reader. And yet Dr. Hammond has frequently insisted that insanity is, and ought to be, exempt from punishment. The instances he gives of discipline in our hospitals for the insane, have no relevancy to the question of punishment of insane persons under the law, to protect society and serve as examples for others of their unfortunate class. Such discipline is part of their treatment, intended for their good.

Dr. Hammond's treatise on "Spiritualism and allied causes and conditions," is of no higher order of composition or preparation, than his "Insanity in its relations to Crime." Both are alike bad. Whatever is bad in the one, finds itself repeated in the other. The jumble of facts, irrelevant materials, and illogical deductions, characteristic, in an equal degree of no other author with whose works we are acquainted, confronts us everywhere. And at last it is difficult for us to say what

are the notions of Dr. Hammond in relation to spiritualism. Indeed, as if to add to our embarrassment and confusion, he discusses, we suppose, as "allied causes and conditions," "sleight of hand," dull tricks practiced by shallow deceivers, upon their still shallower dupes, under the name of spiritualism; "somnambulism, natural and artificial;" "saintly influence on animals," "mesmerism of animals," "human automatism," "hysterical anæsthesia," "hysteria," "Jansenist convulsionaires," "New England witchcraft," "the Jerkers," "Rev. Mr. Wesley's ministrations," "Shakerism," "devil-dancing," "fasting girls," "catalepsy, ecstasy, and hystero-epilepsy," "stigmatization," and other subjects kindred and alien to these. He does not, indeed, find in any one, or all of these diverse crafts and conditions, sufficient evidence to enable him to prove that the phenomena claimed for spiritualism are due to any one or all of them. When it suits his purposes, however, he does not hesitate to insist that any particular phenomenon is produced by one or all of them. In many cases, where his premises are merely potential, and only exist but in supposition, his conclusions are absolute. When he has shown that a given explanation of any phenomenon *may* be true, he does not hesitate to assert that, as the result of his reasoning, it *is* true. Much of his entire book requires the following proposition to be admitted: "Whatever is possible, is actually true." If this be accepted, then "Spiritualism and allied causes and conditions," will stand vastly better than it does. The truth is, Dr. Hammond's facts and arguments do not disprove spiritualism. They only show that it requires further proof, before it is entitled to challenge our full faith. The facts and suggestions which the book furnishes, simply afford ground for a reasonable doubt of the spiritual origin of the very best authenticated phenomena of spiritualism. In other words, they give us an hypothesis, other than that of the spiritualists, which, so far as the facts go, may be sufficient to explain them all. And this is enough for truth, and, indeed, for the argument against spiritualism. It does not satisfy Dr. Hammond, however, for throughout his book

he treats this counter hypothesis, which his argument only shows to be possibly true, as absolutely true, and consequently spiritualism as absolutely false.

Take, for instance, his conclusions in relation to the apparition described by Mr. Owen, whose account of it he quotes at length. The story, as told by Mr. Owen, was received by him from all the persons who were with him when the supposed spirit appeared; and he believed what they said, and that the spirit was genuine. It must have been so, unless Mr. Owen was basely duped. The question presented by the case is, was he duped? To enable us to say so, we must be satisfied that some of those present in the room with Mr. Owen, in concert with others not there, practiced a shameful fraud, by introducing a real human being into the room, and by means of the darkness and the use of a dark lantern, so imposed upon his senses as to impress him with the belief that he had seen a spirit. And this is Dr. Hammond's hypothesis. It contradicts the testimony of all present on the occasion. If the appearance was not a spirit, either they were all deceived, or part of them were guilty of flagrant falsehood and fraud. And this is assumed by Dr. Hammond. He maintains that, inasmuch as a door, not in view of Mr. Owen, might have been unlocked and entered by some person who acted the part of the spirit, and as another with a dark lantern might have entered there also, therefore they did so enter. Hence, he triumphantly concludes: "Mr. Owen was therefore egregiously deceived, and the confederates were Miss B——, Mrs. K——, Mrs. D——, and two others unknown, one of whom played the part of the apparition, while the other held the lantern." Thus, our author concludes that whatever is possibly true, is absolutely true, and this in the teeth of human testimony to the contrary. Nay, he goes further; he does not hesitate to accuse several people of fraud and conspiracy without any fact upon which to found his accusation whatever, except a bare possibility and the assumed impossibility of any spiritual manifestation. And even this does not satisfy the demands of his logic. He sounds the minds of the guilty

parties, and arrives at their motives. He says: "As to their object, a desire for notoriety, or to play a practical joke, or to accomplish some other desired end, would have been a sufficient motive. . . The conspirators knew how credulous and guileless was the gentleman they selected, or rather who forced himself upon them, as their victim, and they took advantage of their opportunity. And this is the sort of evidence on which the phenomena of spiritualism rests!" Well might the reader inquire, Does the Doctor judge others as he would be judged? Or does he accuse others, thus without evidence, of falsehood, trick, fraud and conspiracy, from the fullness of his own heart?

But his sweeping conclusions embrace a denial of all supernatural phenomena, and of all "miraculous interpositions of the Deity in" behalf of any religion whatever; while with singular inconsistency, he professes profound respect "for the fundamental beliefs of Christianity, to which the civilized world owes so much." Is this profession of respect consistent with a denial of the very grounds upon which its founder placed it? He explains the luminous appearance of a young lady's face by attributing it directly "to a relaxation of all the muscles of the face concerned in expression," and "a suffusion of the eyes and dilatation of the pupils." And thereupon he disposes of the miracle of the shining face of Moses, and the transfiguration of Jesus, in this sentence: "Undoubtedly the instances mentioned in the Bible as transfigurations—(see Exodus, xxxiv: 29–35; Matthew, xvii: 1, 2; Mark, ix: 2, 3; Luke, ix: 29)—were of this character." The conclusion, let it be noted, is beyond doubt—"undoubtedly." Surely, the worst proved miracles ever believed in, stand as well in their proof, as the best of these undoubted conclusions of our Philosopher Hammond.

But we have surpassed our space, and must close. The faults are manifest and manifold which disfigure the works of our author. He constantly oversteps the modesty of nature, and makes a caricature of science; assails religion, which must be supernatural or nothing, while falsely offering it lip service;

and, in as far as he has yet attempted to lead the blind goddess justice, either by his testimony or graver discussions, is a blind leader of the blind, whose goal is the ditch.

The book is handsomely printed by "G. P. Putnam's Sons, New York, 182 Fifth Avenue, 1876," on magnificent paper. Knowing its contents, and viewing the superior setting forth which its publishers have given them, one can scarcely refrain from quoting the couplet of Byron, describing the funeral encasements of the remains of King George the Third; but we do refrain.

An Elementary Treatise on Diseases of the Skin. By HENRY G. PIFFARD, M. D. Macmillan & Co. London and New York. 1876.

The handsome appearance of this volume of nearly four hundred pages at once attracts attention. The substantial binding, the fine paper, the large clear type, wide margins, and excellent illustrations, all give evidence of the care and good taste shown by the Messrs. Macmillan in the preparation of their books. The good opinion formed of the book considered as a work of art, will need no modification when it is studied as a literary or as a scientific production.

In the examination of many of the new works that so constantly demand attention, the conviction is often forced upon the reader that, starting with a given number of facts, the chief object of the author has been to cover up and hedge them about with words, as if the value of a book were in direct proportion to the number of its pages. A study of Dr. Piffard's work brings no feeling of this kind, for almost every page gives evidence of a desire on the part of the author to present his facts in the fewest words, yet every statement is clear and distinct.

Another pleasing feature of the book is the evidence it presents throughout of the fact that the author has not simply studied diseases of the skin, through the observations of others; for while it is plain that he is entirely familiar with the

writings of the other workers in the same field, it is equally clear that the terse descriptions of disease given, and the effects of treatment presented, are the result of his own personal experience and observation; and it is this feature that makes the work of especial value to the American student.

The volume is presented "as an introduction to the more elaborate works upon dermatology;" but the practitioner who refers to it will obtain more satisfaction than is usually received from an examination of the more comprehensive works.

In the first chapter is given a description of the anatomy of the skin; and the text is well illustrated by plates from Sappey, Frey, Stricker, and others.

"The Physiology of the Skin," "Symptomatology," and "Diagnosis," are presented in the four succeeding chapters, in a brief and simple, yet entirely satisfactory manner.

The sixth chapter is devoted to classification, and of the three systems—the lesional, the structural, and the pathological—the second, or that based upon cause, is selected. While this may not fulfil the conditions "which are required in an ideally perfect classification," it would, if generally adopted in the classification of disease, have the same effect in medicine as the substitution of the natural for the artificial method has had in zoology, botany, etc.

Under the primary group, "Diathetic Affections," interesting and instructive chapters are given on the syphilides, scrofulides, and rheumides. In the latter class are included eczema, psoriasis and pityriasis. These affections are considered as an expression of a diathesis:—the rheumic, a name selected, first, because the etymological signification implies the idea of exudation; secondly, "because the blood condition underlying this diathesis" is believed "to be similar to, if not identical with, that concerned in the production of rheumatism and gout;" a morbid state in which the albuminoids entering the body as food undergo imperfect oxidation, which manifests itself by various affections, among them those of the skin mentioned.

While the teachings of Bence Jones, and others, point to these conclusions, it is evident that Dr. Piffard has thoroughly investigated the subject for himself according to scientific methods. His views will attract attention because of their importance, even if they be rejected.

In the treatment of these affections, arsenic—the medicine generally considered of chief importance—has no prominent place, the author claiming that its reputation is based upon its undoubted control over many of the manifestations of the rheumic diathesis, rather than upon any influence over "the constitutional conditions which underlie them."

Under the principal groups—third, "Reflex Affections," fourth, "Local Affections," and fifth, "Affections of uncertain nature"—every cutaneous disease liable to be met with is described in a clear and satisfactory manner, and the most approved treatment briefly and simply presented.

The affections embraced in the second group—general non-diathetic affections, *i. e.* eruptive fevers, etc.—coming as they usually do under the care of the general practitioner, not of the specialist, are not considered.

A brief notice like this must of necessity fail to do justice to a work of this character; therefore we recommend all who are interested in the study of cutaneous diseases, to procure the book, and see for themselves that it merits all and more than the praise here given. J. R. W.

An Introduction to Pathology and Morbid Anatomy. By T. HENRY GREEN, M. D. London. Second American from the third revised and enlarged English edition. Illustrated. Philadelphia: Henry C. Lea, 1876.

Space permits us merely to call the attention of the profession to this excellent work, clear and condensed in language, rich in illustrations, bringing under notice the most important matters in pathology, but still only, as its author claims in the title, an introduction; and as an introduction should be used by physicians and students.

THE REVIEW BY "W. C." OF DR. BARTHOLOW'S LECTURE

on the "Principle of Physiological Antagonism as applied to the Treatment of the Febrile State." A Rejoinder.

The number of the American Practitioner for June, 1876, contains a review of my lecture signed "W. C.," who is, I learn from the list of contributors, William Carson, M. D. Nothing in the lecture satisfies the lofty requirements of the reviewer, and he throughout assumes a confident tone of superiority which indicates that he supposes himself entirely exempt from the errors of judgment and opinion to which ordinary mortals are liable. I have no sort of objection to the good opinion which "W. C." entertains of his own merit, nor to the right of just, even of severe, criticism; but I do object to misstatements of my own opinions, and to the expression of erroneous views which put me in a false position, no matter how solemnly and authoritatively they may be uttered by the reviewer. Beside the right which I respectfully claim, to correct inaccurate statements of my opinions by any reviewer whatsoever, it may not be without utility to discuss some of the points raised in the review in question.

My lecture, as its title—to which I ask the especial attention of the reader—indicates, was intended to set forth a principle—physiological antagonism—and to illustrate the application of antipyretics in accordance with this principle to the treatment of pyrexia. I expressly disclaimed a purpose to go over the whole ground of physiological antagonisms. The title of my lecture would have been a remarkable misnomer, if I had meant to discuss the subject of fever. "W. C.," however, determined at the outset to find fault, and accordingly chooses to assume that in speaking of the heat phenomena, I included the whole process involved in "that complexus of actions to which we apply the term fever." His criticism begins as follows:

"We believe that the author has started out on false or insufficient premises when he endeavors to compress the whole of the phenomena of fever into simply 'increased temperature

of the body' or 'a state of preternatural heat,' and that consequently his 'therapeutics' are restricted or constrained."

What I did say is contained in the following extract from my lecture (p. 2):

"In order to a right comprehension of the subject we must have a clear conception of what the febrile state includes. For our present purpose, fever means increased temperature of the body. The rise of temperature above the normal is a result of greater activity of the combustion process. Or, as it has been expressed by Liebermeister (*Handbuch der Pathologie und Therapie des Fiebers*, Leipzig, 1875, page 290), 'the higher temperature of the febrile state is an exaltation of the normal heat-producing process.' It is not necessary to my purpose to admit or deny the existence of Tscheschichin's (*Deutches Archiv f. klin. Med.*, 1867, Band 11, s. 588) heat-regulating center. Whether or not there be an excito-caloric center and a moderating center of combustion in the body, does not affect the inquiry before us; it suffices to accept the definition of fever as a state of preternatural body-heat."

Furthermore, in closing my lecture with a summary of my views on the actions and uses of the various antipyretics, I remark as follows (p. 20):

"When the state of pyrexia is the most important element in the morbid complexus—cold baths, quinia, and digitalis are the remedies to be employed. In the fever of inflammation, is the action of the heart vigorous and the arterial tension high? aconite and veratrum viride are indicated; is the action of the heart feeble and the tension of the vessels low? quinia and digitalis are more appropriate. Is the fever due to putrid ferments, to disease-producing organisms? quinia, salicylic acid are required."

It is evident to any one but a hypercritical reviewer that in discussing the action of "antipyretics," the condition of pyrexia was that part of the "morbid complexus" which chiefly engaged my attention, and necessarily so, and it was no part of my purpose to enter into a general discussion on the subject of fever. Your reviewer, therefore, conveys a

wrong impression of my opinions when he states that I "attempted to compress the whole phenomena of fever into simply increased temperature of the body."

I will, in addition to the above quotations, bring forward some independent testimony to show that "W. C." has wilfully misrepresented my position on the subject of a theory of fever. In a review of my lecture published in the New York Medical Journal for the present month (July, 1876, page 77), the reviewer states: "He discusses the principles which should guide us in the treatment of fever, *but avoids committing himself to any special doctrine concerning its mechanism.*" Italics mine. The two reviewers "flatly contradict" each other. Whose statement is to be believed? Under the circumstances of the case, the credibility of "W. C." is open to grave suspicions.

"W. C." finds fault with me because I defer somewhat to the opinions of Liebermeister, and he intimates that I have no other authority for my opinions. He remarks: "He seems to have adopted the extreme views of Liebermeister on fever, though it is known they are not accepted by some eminent authorities of his own country." Such a gratuitous misstatement deserves the severest reprobation, but I will not apply epithets. The following quotation will show how far "W. C." is to be trusted:

"The changes, functional and organic, to which I now call attention are not those due to the growth and multiplication of cacobacteria and other organisms, or to morbific materials (unorganized) circulating with the blood through the organs and setting up, by their presence, morbid processes, but those alterations due directly or chiefly to the abnormal temperature. These anatomical changes have been designated by the German pathologists 'parenchymatous degeneration.' As respects the muscular system these changes have been especially studied by F. A. Zenker (*Liebermeister's Handbuch*, l. c., p. 445), who describes two forms—a *granular* and a *waxy* degeneration. As these changes occur in various febrile diseases and are extensive just in proportion to the degree of fever

heat, he concluded that the principal factor in their causation is the temperature. In this opinion he is supported by Liebermeister. The changes in the parenchyma of organs (*parenchymatöse Degeneration*) have also been studied by Lehmann (*Ueber das Verhalten der parenchymatösen Entzündungen zu den acuten Krankheiten; Schmidt's Jahrbücher der Gesammten Medicin*, Band 139, s. 239, *et seq.*), by Ponfick (*Anatomische Studien über den Typhus recurrens, Virchow's Archiv*, Band 60, 1864, s. 153), by Klebs (*Zur Pathologie der epidemischen Meningitis, Virchow's Archiv*, Band 34, s. 327, *et seq.*), by Liebermeister (l. c.), and by others."

It seems from this extract that I have not simply "adopted the extreme views of Liebermeister on fever." I also call the reader's attention to the fact that this quotation confirms what I have already stated—that for the purpose of the inquiry before me in my lecture, I necessarily considered only the condition of pyrexia, or "those alterations due directly or chiefly to the abnormal temperature."

Of the paramount importance of the range of temperature in fever, not only Liebermeister but all other authorities are now convinced. Indeed Liebermeister's conclusions are largely based on the researches of others. "W. C." appears to be entirely unacquainted with the remarkable researches of Senator on the disintegration of the tissues during the fever process—the urea and carbonic acid waste; the observations of Naunyn on the urea discharge, of Salkowski on the excretion of alkali salts, and of Leyden on the carbonic acid loss. It is true, rather hot polemics have passed between Senator and Liebermeister as to the relation between heat production and heat retention in fever; but all competent authorities are now agreed that increased combustion of tissue takes place in fever. That "W. C." does not approve of the views of Liebermeister was probably not known in Germany when Ziemssen's *Handbuch* was projected, otherwise the article on typhoid would have been committed to other hands.

In further comment on the relation of the body-heat to the fever process, "W. C." remarks as follows: "Experience

will flatly contradict the statement (page 5) that 'there is a distinct ratio between the amount of disturbance in the cerebral functions and the degree of fever heat.' Who has not seen a typhoid fever patient, in one part of his disease, with a temperature of 105°F., at the same time with subsultus tendinum, delirium more or less active, coma, it may be wakefulness, and other serious symptoms of disturbance of the nervous system; and then at another period of the case, with the same temperature (105°F.) without the presence of any of these threatening symptoms?"

Without stopping to question the accuracy of such observations, it is plain to see that my critic entirely fails to comprehend the point at issue. It may be thus stated: Given disturbance in the cerebral functions produced by the abnormal body-heat, the amount of such disturbance will be governed by the range of temperature. This is a question entirely apart from delirium, coma, and other head symptoms produced by other causes than the abnormal heat.

As respects the influence of the cold bath on fever heat, my critic displays his most authoritative manner and exhibits his usual lack of critical acumen. Let me quote his observations: "It would be too sweeping a dictum—even with the interposed qualification—to say that 'it is simply a question, *cæteris paribus*, of the degree of heat and the amount of cooling necessary to abate it' (page 7). The illustration drawn from Wood does not strengthen the assertion, for it is not applicable."

It is incredible that any one should deny that a cold bath will certainly lower fever heat. How far such lowering of temperature will persist and be curative of fever, is another question. Notwithstanding the satisfactory way in which "W. C." disposes of Wood's experiment—by his own *ipse dixit*—I must still maintain that it exactly illustrates the influence of a cold bath in lessening abnormal heat: "An animal heated in a hot-air chamber until the febrile state is induced, is restored to the normal condition by being plunged into a cold bath." "W. C." is apparently unable to discriminate

between the physical effects of a bath in abstracting heat, and the therapeutical effects of cold baths in fever. His mind is equally clouded when he comes to discuss the antipyretic effects of quinia. He is unable to separate the antipyretic power of quinia, the subject which I discussed, from its curative property. Who does not know that quinia may lower the temperature without otherwise affecting the course or shortening the duration of fever? It was my purpose to show that its antipyretic effect is applicable by its physiological actions, and that in lessening temperature it antagonizes those processes which maintain the body-heat above the normal. "W. C." exhibits an entire inability to grasp questions of this kind.

ROBERTS BARTHOLOW, M. D.

NOTE.—The discussion between Senator and Liebermeister may be found in Virchow's Archiv. In Vol. XLV Senator published a paper entitled *Beiträge zur Lehre von der Eigenwärme und dem Fieber.* In Vol. LII, Liebermeister replies to Senator under the heading, *Zur Lehre von der Wärmeregulirung.* In Vol. LIII Senator appears in a criticism of Liebermeister's paper, *Kritisches über die Lehre von der Wärmeregulirung.* To this Liebermeister, in the same volume, responds under the title, *Nochmals zur Lehre von der Wärmeregulirung.*

REPLY TO DR. BARTHOLOW'S REJOINDER.

In my review of Dr. Bartholow's lecture, I stated that the author had started out on false or insufficient premises, when he endeavors to compress the phenomena of fever into simply "increased temperature of the body" or "a state of preternatural body-heat;" "and that consequently his therapeutics were restricted and constrained." In his rejoinder he says that this is a misrepresentation; and thereupon exhibits himself in an unamiable mood. The latter is unimportant, except as a testimonial to the force of the criticism.

We quote from the beginning of the second paragraph of his rejoinder the following language: "My lecture, as its

title—to which I ask the especial attention of the reader—indicates, was intended to set forth a principle—physiological antagonism—and to illustrate the application of antipyretics in accordance with this principle to the treatment of pyrexia." In passing, I desire to call the attention of Dr. Bartholow and the reader, that this is language quite different from what appears at the head of the lecture. Pyrexia has, in medical usage, a more restricted sense than the words "the febrile state," and is not found in the title of his lecture.

But we shall allow the Doctor to be his own interpreter, which he attempts to be in his rejoinder, by quoting from his language on the second page of his lecture. What is, however, very significant is that he has omitted the first sentence of that paragraph—by far the most important one. For the correct understanding of what he said, whether he meant it or not, I quote it for him; and it will be seen that by taking it and the explanatory sentences which follow together, that a fair construction is that he did mean to compress the phenomena of fever into "simply increased temperature of the body," or "a state of preternatural body-heat." The following is what the Doctor did not quote, as well as the essential points of what he did quote, from the beginning of the paragraph near the top of the second page: "The problem which we have now to consider is, what means are available to antagonize that *complexus of actions* to which we apply the term fever? In order to a right comprehension of the subject, we must have a clear conception of what the febrile state includes. For our present purpose, fever means increased temperature of the body;" . . "it suffices to accept the definition of fever as a state of preternatural body-heat." My reading of this, leaving out intervening words of no importance, is that "the *complexus of actions* to which we apply the term fever" "means increased temperature of the body," "a state of preternatural body-heat."

We have further the right to construe the Doctor's language by the manner in which he has developed and illustrated his subject. He does this by beginning with an enumeration of

some of the effects of high temperature on the functions and tissues of the human body. We took exception to his interpretation of some of the phenomena appearing in the course of diseases, particularly his dictum that "there is a distinct ratio between the amount of disturbance in the cerebral functions and the degree of fever heat." We said that there were, and are, undoubted facts of clinical experience which would compel us to hunt for some other factor "than excessive body-heat," in order to correctly understand the true meaning of the disturbances in the nervous system. Two of them are as follows: First, that you may have a very high body-heat without any of these symptoms; second, that you can have them all with a low temperature. The Doctor says he meant to say that "given disturbance in the cerebral functions, produced by the abnormal body-heat, the amount of such disturbance will be governed by the range of temperature;" which is plainly a begging of the question at issue, which is that the nervous symptoms are due to the excessive body-heat, when they may exist without it, and may not exist with it. How can the Doctor distinguish when they are produced by the abnormal temperature, and when they are independent of it? In the last analysis, his statement means that the cause is equal to the effect, without telling us how to find out the cause; and we may add, that he may reduce the temperature without relieving the nervous disturbance in many (we do not say all) cases.

We say now, as bearing on the Doctor's construction of the equivalence of "excessive body-heat," that he has included in the conditions to be controlled by his physiological antagonisms phenomena which no power of compression in his theory can bring within the range of undoubted effects of excessive body-heat. In other words, he includes bodily certain disease among his illustrations of the antagonizing control of certain remedies. He confuses and mingles together important phases of symptomatic and essential fever as shown in his illustrations by pneumonia, and puts down "exudation of fibrinous material, the migration of the white corpuscles,"

as effects of increased temperature of the body. Is he justified in including (which he does), with our present knowledge, parenchymatous nephritis as an effect of high temperature, when it is very apt to come on in the slighter forms of the disease, and is sometimes delayed a considerable period beyond the disappearance of fever?

Our understanding, then, of this lecture is gathered from two sources—the plain language above quoted, and from the manner of treatment and illustration.

We meant to protest, in our review, against the insufficiency of the Doctor's adjustable formulas of physiological antagonisms in the treatment of fever (and in many instances the mere thermic element of it), and against making "excessive body-heat" the equivalent of the "complexus of actions, which we call fever." We protest now against his asserting, as he does in his rejoinder, that it was no part of his purpose to illustrate the principles of physiological antagonisms by their curative powers (see remarks in rejoinder on quinia), but only by their antipyretic actions, when his lecture is published in a course entitled "A Course of American *Clinical* Lectures," and intended, as the precise words are, "to be trustworthy guides to practice." At the same time we recognize the "excessive temperature" of the body in disease as a matter of great importance. He who pays attention to it alone will be miserably disappointed in many instances, while he shall also have signal success in others, which stand, in clinical work, in strict analogy or correspondence with the experimental cases worked out by some well known investigators, particularly Dr. H. C. Wood, Jr. The current season, as well as former ones, has afforded us the most satisfactory results in the antipyretic treatment of "sunstroke" or "thermic fever." The latter term represents an entity of undoubted occurrence in practice, but it does not include all the "complexus of actions which we call fever." You may eliminate it or suspend it by treatment, and yet you do not cure your patient.

The independent testimony quoted from the New York Medical Journal has no reference to any point in dispute

between the Doctor and his reviewer. Will the Doctor quote all of what the New York reviewer says?

That there is some confusion in the application of the Doctor's exact formulas of antagonisms will be apparent when we compare the following passages; first, from page 14 of the Seguin lecture, as follows:

DIGITALIS.	PNEUMONIA.
Contraction of arterioles, and diminished blood supply.	Hyperæmia of part and dilated vessels.
Exudation checked or prevented by the heightened tonicity of the vessels.	Exudation of fibrinous materials. Migration of white blood corpuscles.
Depression of the temperature.	Elevated temperature.
Lessened action of the heart, and increased power. Arterial tension raised.	Increased action of the heart, and lessened power. Arterial tension lowered.

"There are two periods, speaking from the point of view of my personal experience, in which digitalis renders the most important service in pneumonia, viz., during the stage of hyperæmia and exudation, to limit the area of the inflammatory action, and at the period of crisis to maintain the power of the heart."

And second from page 275 of Bartholow's recently published work on "Therapeutics:"

"That digitalis has any power to prevent the depuration of fibrinous material, to prevent or check the migration of the white corpuscles, or to arrest the multiplication of the cellular elements of inflamed parts, seems to the author highly improbable."

The reader will observe the harmony between the two extracts.

Clinic of the Month.

Treatment of Rheumatic Carditis.—Dr. Peacock, St. Thomas's Hospital Reports, Volume VI, gives the following: The treatment which has generally been adopted for the different forms of rheumatic carditis has been either antiphlogistic—leeching or cupping over the region of the heart, the administration of mercurials, etc., or what may be called expectant—the use of alkalies and salines, etc., as in ordinary cases of rheumatism. I have long almost entirely abandoned the practice of depletion in any form in cases of carditis; for in a disease which, like rheumatism, is so frequently developed in persons not previously in good health or of delicate constitution, I think all depressing measures very undesirable, if they are not imperatively called for, and I believe that the cases do quite as well when the more expectant plan of treatment is followed. When, however, there is much pain in the region of the heart, the application of a few leeches sometimes affords great relief. Having also seen pericarditis developed in a person under full mercurial action, I can not think that mercurials are by any means so useful as was supposed by Dr. Latham, though they are probably valuable adjuvants in the treatment when judiciously administered, tending to check the outpouring of exudation and to assist the absorption of the effused materials.

I generally adopt, or continue if previously in use, the ordinary rheumatic remedies—the alkalies and salines—such as the bicarbonate, tartrate, citrate, or nitrate, of potash; the liquor ammoniæ acetatis, etc., and exhibit small doses of hydrargyrum cum cretâ with Dover's powder, applying at the same time blisters over the region of the heart and following

them by poultices. When the liquid effusion accumulates, the iodide of potassium is generally combined with these remedies, being given at first in small doses, and the doses being generally increased, as otherwise from the ready elimination of the iodide by the kidneys, it is of little use. If the patient be very restless or delirious the Dover's powder is given in full doses, or some more powerful anodyne is administered. When the patient's strength begins to fail stimulants are ordered. It is always somewhat difficult to decide when the time has arrived for the exhibition of stimulants, and it is well to commence their use in very small quantities—not more than a teaspoonful of brandy, for instance—and to increase the doses and repeat them more or less frequently, according to the effects produced. If the remedy answers there will be very obvious improvement in the condition of the patient; he will be less restless and excited, and the pulse will become fuller and firmer; and when judiciously given, I believe there is no class of cases which derive more benefit from the administration of stimulants than the acute inflammatory affections of the heart.

During the progress of the case I continue the administration of the slight mercurial and the iodide, and repeat the application of blisters and poultices over the region of the heart, or paint the surface with the tincture of iodine, till the symptoms and signs of active disease subside. The patient is also kept in bed till convalescence is well advanced, and he is only allowed to lie on the outside of the bed or on a couch till he has gained strength and all danger of relapse has passed away. In a large proportion of cases, the patient becomes anæmic toward the end of the attack, and quinia and iron are then given. When after considerable time has elapsed, there is still some uneasiness in the region of the heart and pains are felt in the joints and other parts of the body, advantage may often be derived from the administration of small doses of iodide of potassium, bicarbonate of potash and colchicum, combined with bark or quinia and iron. In such cases also relief is often obtained by the application of belladonna plas-

ters over the præcordia, or by simply covering the surface with some warm material.

Of late years I have generally adopted in cases of rheumatism, whether simple or complicated, the blister treatment as recommended by Dr. Herbert Davies. I believe the blisters to be very efficacious in arresting the inflammation in the joints, and, when several are employed simultaneously or in rapid succession, in relieving the constitutional disturbance also. The benefit which results from the treatment is, I think, in direct proportion to the freedom with which the blisters are applied; and, though the first effect is generally to increase the febrile disturbance and raise the temperature for a few hours, the most remarkable amendment, both local and general, ensues. I have been repeatedly told by patients that the pain caused by the application even of four or five blisters at the same time, is far less than that which they had experienced from the disease. In a recent instance a man, whom I had twice previously treated for acute rheumatism, in the one attack by blisters and in the other by general means, told me that he was much more completely and more rapidly relieved by the blister treatment; which was therefore again employed in his third attack. The blisters are applied around the limb above all the affected joints, and the surfaces are poulticed till they entirely heal. Though I have generally employed the ordinary anti-rheumatic treatment in conjunction with the blisters, when the patients have been much exhausted, from the long duration of the symptoms before admission into the hospital, or from their being the subjects of old heart disease, or being weakened by any other cause, as by prolonged nursing, I have sometimes relied exclusively upon the blisters, and have never had reason to doubt the propriety of having done so. In some cases, however, of very severe rheumatic fever, I have thought, on reviewing the cases, that the constitutional treatment might with advantage have been more freely used in combination with the local measures.

In reference to the effect of the blister treatment upon the development of the cardiac complications of rheumatism, I

believe it is both preventive and curative. As the heart and other internal organs become affected almost always in the earlier and more active stage of the disease, any treatment which tends to shorten the duration of this stage must lessen the liability to the occurrence of such complications; and I have no doubt that more rapid and complete relief of the local inflammation is obtained by blistering than by any other means. I think, however, that the treatment does more than this. I have seen, in cases in which complications were very decidedly threatened, the progress of the internal disease apparently entirely arrested by the application of blisters to all the affected joints at the same time.

On the Process of Fever.—Dr. J. Burdon Sanderson thus concludes a paper on this subject, Practitioner, June:

A satisfactory explanation of the nature of fever and of its relation to the febrile process is not at present possible, because we are not as yet possessed of the necessary physiological knowledge. We have stated that two possibilities are open to us. One is, that fever originates in disorder of the nervous centers, that by means of the influence of the nervous system on the systemic functions, the liberation of heat at the surface of the body is controlled or restrained, so that "by retention" the temperature rises, and finally that the increased temperature so produced acts on the living substance of the body, so as to disorder its nutrition. The other alternative is that fever originates in the living tissues, that it is from first to last a disorder of protoplasm, and that all the systemic disturbances are secondary. In both hypotheses it is tacitly assumed that fever is the product of a material fever-producing cause contained in the blood or tissue juice, the morbific action of which on the organism is antecedent to all functional disturbances whatever. At bottom we are all humoralists, and believe in infection. It is not until we have to say where and how the infection acts that questions arise.

The facts and considerations we have had before us are, I think, sufficient to justify the definitive rejection of the first

hypothesis in all its forms; for, on the one hand, we have seen that no disorder of the systemic functions, or of the nervous centers which preside over them, is capable of inducing a state which can be identified with febrile pyrexia; and, on the other, that it is possible for such a state to originate and persist in the organism after the influence of the central nervous system has been withdrawn from the tissues by the severance of the spinal cord.

We are, therefore, at liberty to adopt the tissue-origin of fever as the basis on which we hope *eventually* to construct an explanation of the process. But if we attempt to do so *now*, we shall at once find ourselves in face of an unsolved physiological problem, that of the normal relation between temperature and thermogenesis, for the elucidation of which it is necessary to investigate much more completely than has yet been found possible, the influence of temperature variations on those chemical processes in living tissue, with which thermogenesis is necessarily associated. The little that has been already accomplished in this direction is sufficient to show that the living substance of our bodies is, if I may so express myself, delicately sensitive to variations in the temperature of its environment, so that very slight deviations from the normal may produce effects of surpassing magnitude.

Aphasic Amblyopia and Amaurosis.—Dr. Galczowski, in a paper upon amblyopia and amaurosis occurring in those affected with aphasia, *Archives Générales*, June, presents the following conclusions:

First. That the amblyopiæ of which the aphasic complain, are due rather to a failure of memory and an amnesia of letters and words, than to a diminution of acute vision.

Second. That in a certain number there will be found amblyopia with hemiopia of the right side of the two eyes.

Third. That in quite exceptional cases, there is papillary atrophy in one eye, habitually the left.

Fourth. The amblyopia can be cured and vision return more or less completely.

A New Method of Treating External Aneurism.—Walter Reid, M. D., R. N. Staff Surgeon, Royal Naval Hospital, Plymouth, in a short monograph, gives the result of treatment of a case of popliteal aneurism with Esmarch's bandage. Genuflexion was tried, also rapid compression by one of Carté's compressors applied to the femoral artery at the pelvic brim, the Esmarch bandage was resorted to, the theory being that if every blood current in the limb could be arrested, that absolute stagnation of the blood left in the aneurismal sac must be produced, and its coagulation follow as a consequence.

"Accordingly," the author says, "I proceeded the next day to apply Esmarch's bandage from the toes upwards to the aneurism in the popliteal space. Here it was passed lightly over the tumor, and then carried on rapidly as high as the junction of the middle with the lower third of the thigh. The elastic tubing was then wound round the limb over the highest turn of the bandage, which was now removed. The entire circulation below the tubing was thus arrested, and the limb, all but the aneurismal cavity, emptied of its blood. The parts assumed a death-like pallor, and gradually lost temperature."

After fifty minutes the elastic tubing was removed, and a Carté's compressor applied to the femoral at the pelvic brim, to prevent the blood current from washing away the newly-formed clot in the sac. A few minutes afterwards the compressor was removed, and no pulsation could be detected in the aneurism, which felt quite hard. The patient himself applied the compressor at intervals for twenty-four hours. The collateral circulation established itself at once, but the pulsation never returned.

The author thinks the success was due to the novel method of treatment, although previous compression might have had some influence on the result, and that one can empty the limb of its blood and yet keep the aneurismal sack full. He gives the following conclusions in regard to coagulation:

First. That at a reduced temperature *in vacuo* coagulation is hastened.

Second. That atmospheric air being simply excluded in a stoppered bottle, the temperature not being reduced, coagulation is retarded.

Third. That all communication with atmospheric air being prevented, the temperature not being reduced, coagulation is much retarded, and hence the influence of a cold death-like condition in the limb aided in producing a sure and speedy coagulation in this case.

A note of the case, eight months after the cure, says there is a small lump in the left popliteal space, which can only be distinguished when compared with the opposite side. The femoral pulsates as far as Hunter's canal, below which it is occluded. The patient reports one leg as good as the other. The author remarks that the method is at least simple, and requires neither surgical dexterity nor expensive apparatus for its trial, and that it is as safe, and perhaps safer, than any method hitherto known to surgery.

Precaution in reference to Puerperal Fever.—Dr. Henry Gervis, in a paper upon puerperal fever, St. Thomas's Hospital Reports, Volume VI, New Series, thus refers to this topic: Although not believing puerperal fever, so called, to be a specific fever capable of transmission except through the actual transfer of septic products, I have seen too many instances of the kind to doubt that the medical attendant may be the involuntary agent in so transferring it. Whenever, therefore, a medical man is in attendance on a woman suffering from puerperal fever, and it devolves upon him to use the uterine douche, or in any way bring his fingers in contact with the secretions of her genital passage, he runs considerable risk of transferring septic poison to any other patient he may attend. And conversely, any medical man who has to dress an erysipelatous or sloughy wound, or come in close contact with cadaveric poison or other source of sepsis, runs some risk, without at all events the greatest care, of inducing septicæmia in any lying-in woman he may attend, if by chance she present any absorbent surface accessible to the poison. As

to how long a medical man who has become infective may so continue, it is most difficult to decide. I have known it continue in the case of medical friends until the hope of ever being otherwise was well nigh despaired of, in spite of all kinds of baths and ablutions; but were my advice asked under similar circumstances now, I should certainly recommend the plan of disinfection by iodine suggested by Dr. Wynn Williams.

Crayons of Tannin.—In the *Annales de Gynécologie*, May, we find the following formula for the preparation of crayons of tannin: To fifteen grains and a half of tannin add a drop and a half of glycerine, and make a crayon nearly four inches in length. Crayons thus made will keep their forms for months; they may be lengthened or shortened as required, after simply warming them in the fingers, and yet are sufficiently firm to be passed into the uterine cavity without breaking them. In consequence of their ductility, they may be lengthened so as to make them into astringent bougies, and then introduced into the urethra will be an efficient substitute for tannin injections.

Dyspepsia a Gastritis.—M. Leven, in a paper read before the Paris Academy of Medecine, May 16th, *Archives Générales*, recounted experiments upon the dog, whose stomach presents the most marked analogy with that of man, giving the animal food that could not be digested, and finding two hours after the evidence of a more or less severe phlegmasia; and concludes that dyspepsia is not a mere functional disorder, not a gastralgia or neurosis, but is really an inflammation of the mucous membrane and subjacent tissue. According to him, too, simple ulcer of the stomach is always due to an anterior dyspepsia, and does not result, as Virchow has suggested, from thrombosis or embolism. He has tried to produce these ulcerations by injecting the arteries of the stomach with powder of lycopodium, but never succeeded: the numerous arterial amastomoses of the stomach readily compensate for the obstruction of a vessel.

Notes and Queries.

SELF-ABUSE IN WOMAN.—Dr. Pouillet has recently published a carefully prepared essay* upon this subject, and though there are statements in it as to the extent to which self-abuse in the female sex exists, that may be quite true in France, they are very far from true in this country. While it is believed that this vice is far from common with us, yet it does exist. The translator happens to now know of five cases in girls under eighteen; and quite recently he has been consulted in the case of a married lady, the mother of two children, of good social position and of excellent character, and who would be willing to submit to any treatment promising a cure; and a brief study of Pouillet's work, though dealing with one of the most loathsome of human depravities, may be useful.

The author observes that of all vices, of all turpitudes, that can justly be termed treason against nature, preying upon humanity, menacing its physical vitality, and tending to destroy its intellectual and moral essence, the greatest and the most widely diffused is masturbation. The vice exists in both sexes, at all ages of life, in all places, and in all classes of society.

Pouillet, though indorsing the criticism of Lallemand upon the unfitness of the term Onanism, quoting the familiar Bible story, still retains it, defining it as an act against nature, made by means of a living organ—the hand or tongue—or by any instrument whatever, for the purpose of producing the venereal spasm. In alluding to the assertion that self-abuse is natural, he refers to the manifestations of the vice in dogs and monkeys.

* Essai Médico-Philosophique sur les Formes, les Causes, les Signes, les Consequences et le Traitement de L'Onanisme chez la Femme. Paris, 1876.

That the vice among women is one of at least great antiquity is shown by the seventeenth verse of the sixteenth chapter of Ezekiel; by the story of Sapho and the Lesbian girls who despised men and sacrificed alone to Venus, and who were surnamed *tribades*, from the method in which the venereal orgasm was produced; by the conduct of the Roman women under the Emperors, so bitterly denounced by Juvenal; by the numerous instruments for self-abuse, of bronze, of gold, etc., found in the excavations of Pompeii and Herculaneum: these *priapi* or *phalli* of ancient times, have their counterparts in China at the present day, in similar instruments of a gum-resinous mixture, somewhat flexible and flesh-colored.

In the middle ages manualization, as Pouillet terms it, was probably in part the cause of nervous epidemics—epilepsy, hysteria, chorea, catalepsy, ecstacy, *furor uterinus*, etc.—so generally regarded by canonical judges as manifestations of sorcery.

The vice is probably more common to-day than formerly, but more concealed. One reason for this belief is found in the literature of the age; two well known romances—one by Gauthier, the other by Belot—have as their point of departure, their vital knot, *tribadia* or masturbation in common: novelists do not invent vices, they merely reflect those that society offers.

The two divisions of masturbation made are *vaginal* and *clitoral*, the former being less frequent and is almost always solitary; and the latter presenting itself under three forms—first and most frequent, the individual performs friction of the clitoris herself; second, another does the office; and third, *bestial*—too abominable to be further explained—which is said to be far from rare in large cities.

We have not time to follow the author in his exposition of the causes, physical, intellectual and moral; want of cleanliness, certain eruptions on the external sexual organs, such as eczema, psoriasis, etc., and especially vulvar pruritus; some medicines and condiments, cantharides, phosphorus, savin,

absinthe vere, etc., pepper, cloves, cinnamon, musk, vanilla, etc.; the rectum loaded with scybala, or tormented with oxyures; dancing, riding on horseback, prolonged sitting, the use of sewing machines;* lascivious images, statues, paintings, romances, plays, obscene gestures, the contagion of example, "boarding schools are frequently centers of infection," hereditary influence, impotent or abhorred husbands, widowhood, etc.

The author regards the consequences of Onanism as more serious than those of venereal excess; they are sometimes mortal, often terrible, always injurious.

In considering the treatment of the affection, Pouillet devotes considerable space to the prophylaxis, dividing the preventive means into physical, social, intellectual, and moral. He especially interdicts girls seeing obscene or voluptuous statues, reading romances or vulgar books, visiting theaters, hearing any licentious conversation, and advises assiduous daily intellectual toil, and cultivating a taste for art.

We have often thought that those whose ardent imaginations were liable to bear them away into the darkness of impurity of thought, desire or deed, would do well to ponder and practice the wise words of the wisest of men, whose own life had been terribly tainted with licentiousness, Keep thy heart with all diligence, for out of it are the issues of life.

But prevention having failed, persuasion should be tried, the development of noble sentiments recognized, shame, dread of exposure, should be appealed to, and the fearful consequences of the vice pointed out. The subject should be required to exercise the body until fatigued, and to retire early to bed, and rise early. If the patient is married, the maternal sentiment should be appealed to—the danger of sterility or of diseased offspring made known.

In the case of children, it is necessary to constantly watch

* We wonder that the author in this connection has not referred to the fact that a Greek law forbade women to be weavers, for precisely the reason which may be urged in certain cases against the use of a sewing machine.

them, and even to resort to corporeal punishment* whenever detected in manualization.

Infibulation is spoken of only to be condemned. The camisole, while of great utility in the male, is of much less value in the female, since by the movement of one thigh upon the other, or by rubbing the external organs of generation upon the edge of a bedstead or of the table, voluptuous excitement may be produced. Pouillet suggests a bandage similar to that worn by Circassian girls, that shall completely close the vulva, leaving space for the escape of urine and the menstrual flow.

Clitoridectomy is so repugnant that it should only be resorted to in the last extremity, and then after the concurrence of able consultants.

The author states that no medicines have any marked effect upon masturbation. It is possible that camphor, turpentine, the bromide of potassium, monobromide of camphor, etc., by their general sedative influence, may have an effect upon the genital organs, lessening their vitality, and therefore may be tried with the treatment previously advised.

Dr. L. P. Yandell's Report on Dermatology.—The report on dermatology made to the Kentucky State Medical Society last April, by Dr. L. P. Yandell, Jr., and published in the May number of the American Practitioner, has been issued in pamphlet form. We regard it as an admirable paper, most useful and suggestive. The general propositions that he has maintained, viz., that chronic skin affections chiefly originate in the strumous diathesis, while the acute are malarial in source, constitute when fully established a most important advance, and will wonderfully simplify the therapeutics of these diseases. But are these propositions true? Medical observation must decide. But we believe that among the physicians of the west and south there will not be any great dissent, and that the general professional acceptance of Dr. Yandell's views is probably merely a question of time.

* In the cases of the girls to which reference has been made, a cold plunge and shower-bath have proved most useful.

INTERNATIONAL MEDICAL CONGRESS—PHILADELPHIA, SEPT. 4–9, 1876.—The International Medical Congress will be formally opened at noon on Monday, the fourth of September. The sessions of the Congress and of its Sections will be held in the University of Pennsylvania, Locust and Thirty-Fourth streets. The general meetings will be held daily, from 10 to 1 o'clock. The sections will meet at 2 o'clock. Luncheon for members of the Congress will be served daily in the University building from 1 to 2 o'clock.

On Wednesday evening, September 6th, Dr. J. J. Woodward, U. S. A., will address the Congress on the Scientific Work of the Surgeon-General's Bureau.

The public dinner of the Congress will be given on Thursday evening, September 7th, at 7 o'clock.

The registration book will be open daily from Thursday, August 31, to Saturday, September 2, inclusive, from 12 to 3 P. M., in the Hall of the College of Physicians, northeast corner of Thirteenth and Locust street, and at the University of Pennsylvania on Monday, September 4, from 9 to 12 M., and daily thereafter from 9 to 10 A. M. Credentials must in every case be presented.

Letters addressed to the members of the Congress, to the care of the College of Physicians, northeast corner Locust and Thirteenth streets, Philadelphia, during the week of meeting, will be delivered at the University of Pennsylvania.

The Secretaries of State and Territorial Medical Societies are requested to forward without delay to the Chairman of the Committee on Credentials—I. Minis Hays, M. D., 1607 Locust street, Philadelphia—lists of their duly accredited delegates to the Congress. Delegates and visitors intending to attend the Congress are earnestly requested individually to notify immediately the same committee. This information is desired to facilitate registration, and to ensure proper accommodation for the Congress.

Members intending to participate in the public (subscription) dinner of the Congress will please notify the Secretary of the Committee on Entertainment, J. Ewing Mears, M. D., 1429 Walnut street, Philadelphia.

THE EXCITABILITY OF THE HEART.—In a recent note on the excitability of the heart, read before the Académie des Sciences, M. Marey shows that this organ, at each phase of its revolution, undergoes changes of temperature which modify its excitability. Experiments demonstrate that the excitability of the heart, like that of other muscles, augments and diminishes with variations of temperature, and his experiments also demonstrate that the excitability of the heart changes at different phases of its revolution. This leads us to ask whether the temperature of the heart does not vary at different instants of its revolution, and also whether the succession of these variations is not such that the period of cooling corresponds to the phase of least excitability?—and further experiments have enabled him to return an affirmative reply to both these questions. The heart increases in temperature while it executes its mechanical work, and cools down as it relaxes. The moment when the heart is coldest, and consequently least excitable, is that when it has accomplished its period of cooling down. This will be the *début* of the systolic phase, and experiment is now in full accordance with theory. (Lancet.)

AN AMERICAN DERMATOLOGICAL ASSOCIATION.—A meeting for the organization of such an association will be held in the University of Pennsylvania, Philadelphia, on Wednesday, September 6, at 6 P. M. Doctors Bulkley and Fox, of New York, Wigglesworth of Boston, L. P. Yandell, Jr. of Louisville, and J. E. Atkinson of Baltimore, unite in the call.

DR. FLINT'S ARTICLE IN THE JANUARY NUMBER OF THE AMERICAN PRACTITIONER.—This will be found republished in the *Archives Générales* of July.

A DESERVED HONOR.—William R. Warner & Co., of Philadelphia, have received the prize medal of the Chilian World's Fair, for the superiority of their soluble sugar-coated pills.